

# JRC SCIENCE AND POLICY REPORT

# Publicly funded research, development and demonstration projects on electric and plug-in vehicles in Europe - update

*New projects till the end of* 2014

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#### Abstract

The previous report on the publicly funded research and development and demonstration projects included ongoing and recently concluded projects with the information available in 2011-2012. The aim of the current work was to update the collection of the on-going or recently concluded research, development and demonstration projects on electric and plug-in hybrid vehicles, which received EU and national public funding with the total budget of more than 500000 Euro, in order to update the EV-Radar tool with new projects. Altogether 158 R&D and demonstration projects have been found and analysed in this report from EU member states and EFTA countries.

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#### 1. INTRODUCTION

The previous report on the publicly funded research and development and demonstration projects included ongoing and recently concluded projects with the information available in 2011-2012. The aim of the current work was to update the collection of the on-going or recently concluded research, development and demonstration projects on electric and plugin hybrid vehicles, which received EU and national public funding with the total budget of more than 500000 Euro, in order to update the EV-Radar tool with new projects. Altogether 158 R&D and demonstration projects have been found and analysed in this report from EU member states and EFTA countries. The report consists of a brief review of the relevant policy documents, methodological aspects of data collection and analysis, description of the results per project category – Research & Development and Demonstration projects respectively. In Section 5 we draw conclusions based on the results obtained. The complete catalogue of the projects included in the database is provided in Annexes 2 and 3, Annex 4 contains the improvements that were made to the EV-Radar with the assistance of the inhouse IT expert of JRC, Annex 5 contains the presentation slides of the intermediate meeting held that also provides recommendations on the KCERT upgrading.

#### 2. METHODOLOGY

The data on research, development and demonstration projects on electric and plug-in vehicles, which receive public funding, has been collected by means of (i) on-line research, (ii) validation of specific project information through distribution of project information templates among project coordinators. Only indirect funding actions have been considered in this report. Hence, this report does not cover direct funding of for example University staff or laboratories. On-line search of the existing projects has been performed in the period of June-November 2014. With the iterations regarding the information exchange with the project coordinators the cut-off date for updating the information was beginning November 2014. Based on the obtained data, EU co-funded and Member state co-funded on-going or recently concluded projects were identified. Based on the type of projects found a new category of projects for R&D has been added – infrastructure. The project

coordinators were asked to validate and/or complete the project information sheets and provide a high resolution photos for their project with the permission for JRC to use it on their website. The validation process permitted the refinement of the project information, especially in terms of budget. Further, the adjustments to the EV-Radar tool were performed and the Statistical elaboration of the collected data was conducted to have an overview of the obtained information and compare the previously found projects with the new ones.

#### 3. RESULTS: R&D PROJECTS

In this section, we describe the main findings for the information that we collected on the R&D projects.

#### 3.1.R&D projects: distribution across countries

In the new projects database, the majority of ongoing or recently concluded R&D projects are co-funded by the European Union and Germany (Figure 1). Norway, Poland, Denmark, Sweden, Austria, Poland and the Netherlands are also among the countries that funded the R&D projects in this period. Overall, EU has provided the largest amount of co-funding and its projects have the largest share of the total budget in the database (Figure 2), followed by Germany and Denmark.



Figure 1 Distribution of projects per funding country (number of projects)



Figure 2 Distribution of total budget per country

In terms of the components that are being targeted by publicly funded R&D projects, the largest number of investments are related to energy storage and vehicle body and architecture while there are also significant investments that focus on multi-component R&D (Figure 3). The total investment of the electro-mobility R&D projects shown in this report adds up to 196 million Euro.

Figure 3 shows the total budgets of R&D projects, broken down by component. Figure 4 shows the distribution of EU and Member State level investments in R&D per component. In the EU co-funded projects the highest amount of funding is dedicated to energy storage that receive a total investment 72 Mln Euro and vehicle and architecture with 63 Mln. Taking a closer look energy storage related projects (Figure 4) receive a total investment of more than 150 Mln Euro. Second biggest component field in terms of budget is vehicle and vehicle artchitecture related projects (Figure 3) followed by controls and other type of projects.



Figure 3 Distribution of total investments and public co-funding in publicly co-funded R&D projects



Figure 4 Total investments in R&D projects in Member States and EU per vehicle component



Figure 5 Countries (per partner) involved in EU co-funded R&D EDV projects

Considering the composition of the origin of partners in the EU co-funded R&D projects, it can be noted that partners come from most of EU member states, with more than 50% of the partners coming from Germany, Spain, Austria, Sweden and Belgium. The organizations of the EFTA country - Norway - are also well represented in the consortiums of EU co-funded (Figure 5).

#### 3.2.Energy storage

Energy storage projects are the most numerous projects among the portfolio and most important based on budget figures of publicly co-funded projects mentioned in this report. Overall, the largest budget amount on energy storage related projects in the database is co-funded by the EU (Figure 6). Some of these projects integrate also other components, such as charger; controls and electric motor (Figure 6). Overall the projects are focused on the understanding the degradation patterns of the batteries and battery cells (i.e. BATTERIES 2020, MARS-EV); advanced materials for battery cells (i.e. MAT4BAT, MALISU); battery new technological concepts to overcome shortcomings of lithium-ion batteries (i.e. NECOBAUT; ACEMU) and battery recycling.



Figure 6 Budget (million Euro) distribution of energy storage related projects per co-funding MS

#### **3.3.Electric motor**

Research and development in this area focuses on, alternative materials (i.e. MAG-DRIVE and on alternative concepts such as in-wheel-motors. Most commonly the projects that research on the electric motors are also combined with the research on controls (Figure 7).



Figure 7 Budget distribution (million Euro) of electric motor related projects per co-funding MS

#### **3.4.Controls**

Overall, research and development in this area is looking into controls for the enhancement of electric vehicle energy management systems, power grid communication, battery life monitoring, temperature management systems, predictive control. Several types of projects can be identified that address research and development of different types of control systems in EDVs (Figure 8).



Figure 8 Budget distribution (million Euro) of controls related projects per co-funding MS

#### **3.5.Thermal management**

Research and development in this area covers the field of advanced new technologies needed for more efficient heating/cooling of electric vehicles, including thermal modeling and optimization of the passenger compartment, interior air handling, cooling loop design, front airflow and e-motor and battery cooling systems (i.e. E-DAS). Thermal management related R&D is in most cases associated with R&D of control components (Figure 9).



Figure 9 Budget distribution (million Euro) of thermal management related projects per co-funding MS

### **3.6.Vehicle (body and architecture)**

Projects in the area of vehicle (body and architecture) may be largely divided into the following sub-categories: a) development of a new vehicle, especially light duty commercial vehicles; b) safety aspects of a vehicle, and c) light-weight materials use and lightweight design solutions.



Figure 10 Distribution of vehicle body and architecture related projects per co-funding MS

In this update, only EU co-funded large-scale projects have been identified (i.e. OPTIMORE, SafeEV, EVREST, MATLEV) (Figure 10).

#### 3.7.Charger

There are generally two main types of charging systems: on-board or stationary. These charging systems are intended to complement one another, with each being more suitable for different charging scenarios (e.g. slow versus fast charging). Research and development is focused on advanced charging solutions for electric vehicles such as (wireless) inductive charging. There are only a few projects that are related to charger only R&D. Funding comes prevalently from Germany, Sweden and the EU (Figure 11).



Figure 11 Budget distribution (million Euro) of charger related projects per co-funding MS

#### **3.8.Chassis**

Chassis related R&D research topics for EDVs aim at fully exploiting potential efficiency improvements. Also vehicle dynamics aspects are to be addressed when adapting conventional vehicle technologies to electric and hybrid vehicles. In particular, projects in this update focus on the research on the individual wheel motors (i.e. CIPED and EUNICE). EU co-funded projects play a major role in the R&D for this type of component (Figure 12).



Figure 12 Budget distribution (million Euro) of chassis related projects per co-funding MS

#### 3.9.Infrastructure

There are a number of projects that cover the infrastructional aspects of research and development, in particular inductive charging (UNPLUGGED, FastinCharge) and communication software of V2Infrastructure (i.e. Swedish project ELVIIS) (Figure 13). Here the EU con-funded project amount for most of the invetments, however although for some project the information on the budget was not available, we thought it was still important to mention them in this review (i.e Austrian project Sorglos).



Figure 13 Budget distribution (million Euro) of projects related to Infrastructures of EDVs per co-funding MS

#### 3.10. Other types of R&D projects

This category includes projects for modelling, coordination and monitoring of research and development for electric vehicles in Europe and projects that could not be associated to any of the other categories. These projects often assist in better coordination between different R&D directions, creat opportunities for SMEs, provide education and training, assessment of costs and benefits of introduction of EVs in a certain national market. Projects as for example GO4SEM (EU), SMART EV-VC (EU), DEFINE (EU) are part of this category. The EU, Germany, Austria, and the Netherlands play a dominant role in co-funding these projects in this update (Figure 14).



Figure 14 Budget distribution (million Euro) of R&D projects related to other types of R&D EDV thematic per co-funding MS

#### 4. RESULTS: DEMONSTRATION PROJECTS

Largest investments in demonstration projects in this update are already running in Europe. Figure 15 shows information on the number of projects and budget levels of the demonstration activities in each member state. The budgets of the demonstration projects displayed in Figure 15 add up to a total of 253 mln Euros. The highest amount of demonstration projects are co-funded by Germany and EU (Figure 15).



Figure 15 Demonstration projects number per country of co-funding

Figure 16 portrays the number of projects per city. In the graphs only cities with >1 project were included, while in the database the complete set of projects and cities can be found. A high concentration of demonstration projects in Germany are noted around the cities of Berlin, Bremen and, the Ruhr area. In Norway they are concentrated mostly in Oslo. In Portugal the highest number of projects can be observed in Lisbon.



Figure 16 Number of projects >1 per city

#### 5. CONCLUSIONS: COMPARISON EV-RADAR (<2011) VERSUS UPDATE (>2011)

A comparison between the first version of the dataset and the present version update was performed. Due to the different time frame - the first version of the dataset took account a larger timescale, with all the projects started before 2011, while the update considered only the projects that were ongoing/finalized in 2014 – a comparison based on absolute numbers of projects and budgets was unfeasible due to the fact that a smaller number of projects was collected in the updated version of the database. Primarily the share of cofounding resources – both EU and Member States - between demonstration (DEMO) and Research and Development (R&D) projects that both in the first (~ 88%) and in the update (~ 75%) version of the database, most of the budget was conferred to R&D projects (Figure 17).



Figure 17 Comparison of EU co-funding between current and previous set of projects included in EV-Radar

For MS co-funded projects, the first version of the dataset was characterized by a slightly smaller percentage of budget allocated to R&D projects (~ 52%), but in the updated version, this percentage decreased down to 0.06% (Figure 18). It is interesting to observe that in both EU and MS co-funded projects the pattern of variation of budgets between the

first version (<2011) and the update version (>2011) is the same, although with different order of magnitude, with an increase of shared co-funded budget for the DEMO projects.



Figure 18 Comparison of the current and previous set of projects included in EV-Radar

For R&D projects, an analysis of the percentage distribution of projects number per component (%), in both the database versions, was performed (Figure 19).

For both databases, the research projects related to the *Energy Storage* components were the most numerous with exactly the same percentage (25%). The projects on *Chassis* were, for both the database, the less numerous. From the comparison of the difference of sharing the number of projects among components in the first and in the update version, it is possible to observe an increase of research projects related to components external to the electric vehicle (i.e. *Charger; Other*). This result, together with the increase of demonstration projects budgets co-founding share (both for EU and Member States funds) depicts a scenario oriented toward a more advanced knowledge on the integration of electric vehicle in the daily life.



Figure 19 Comparison of the current and previous set of projects included in EV-Radar per components

## Annex I

## R&D project list in excel files

Cou ntry of fund ing	Vehicle Compon ent	Abbrevi ation of the project	Name of the project	Co- funding body	Short description	Coodinator organization	Link
EU	Vehicle	AMBER- ULV	(Automotive Mechatronic Baseline for Electric Resilient Ultra-Light Vehicle)	FP7	Additionally improved driving dynamics performance can more easily be achieved because of the reduced mass. However, the design of ULV sharing the same road with heavier cars represents a complex technical challenge for achieving acceptable safety levels. Furthermore, at present the additional purchase costs of a pure battery electric vehicle one as compared with a gasoline is more than 15000 Euros. Consumers buy a new vehicle because many and diverse reasons, including purchase price (one of the main concerns of the majority of buyers when approaching to purchase a new vehicle), depreciation rate, styling, performance and handling, brand preference and social image. However, car owners tend to underestimate the costs of running a vehicle. Although they are very well aware of fuel costs, road tax and insurance, they do not always account for servicing, repair and cost of depreciation. Therefore, if one is interested in comparing the cost of EV with other competing vehicle technologies the parameter of interest should be the Total Cost of Ownership (TCO). The project proposal AMBER-ULV aims to develop and integrate several innovative concepts, resulting from successfully completed R&D projects, giving a socially acceptable answer to safety concerns but not penalising the driving experience.	CES CENTRO STUDI INDUSTRIALI SRL	http://ambe rulv.eu/
EU	Controls	ARMEV A	(Advanced Reluctance Motors for Electric Vehicle Applications)	FP7	The main scientific objectives of the ARMEVA project are the development of multiphysics simulation models for advanced reluctance motors, comparative assessment to select optimal motor topology for future EV's and development of an integrated electric drive system. The entire system consisting of control software, power electronics and a physical electric motor will be integrated and validated in a vehicle platform. ARMEVA will use a system based approach using multi-attribute techniques to improve the overall concepts and multi-application, multi-operation analysis to optimize vehicle level efficiency in a wide range of realistic conditions.	PUNCH POWERTRAIN NV	n/a
EU	Vehicle	BEHICLE	(BEst in class HIriko vehiCLE: Safe urban mobility in a sustainable transport value-chain)	FP7	The BEHICLE project will deliver a safe, lightweight, performance enhanced and updated version of an existing urban Electric Vehicle (EV), namely the IEM QBEAK car (http://e-mobility.insero.com/).	FUNDACION TECNALIA RESEARCH & INNOVATION	http://behicl e.eu/
EU	Vehicle	epsilon	small Electric Passenger vehicle with maximized Safety and Integrating a Lightweight Oriented Novel body architecture	FP7	epsilon is an EU collaborative research project that aims to conceptualise and prototype the electric urban small vehicle of 2020-2025. It will focus on the development of an innovative electric vehicle concept specifically designed for the typical transport tasks in urban areas.	FKA FORSCHUNGSGESEL LSCHAFT KRAFTFAHRWESEN MBH AACHEN	http://www. epsilon- project.eu

Cou ntry of fund ing	Vehicle Compon ent	Abbrevi ation of the project	Name of the project	Co- funding body	Short description	Coodinator organization	Link
EU	Energy storage Controls	GASTON E	New powertrain concept based on the integration of energy recovery, storage and re-use system with engine system and control strategies	FP7	Project results will be experimentally demonstrated at bench level (engine test rig) while the benefits of the engine down-sizing, combination of control strategies and the reference mission(s) and integration with hybrid or hybrid-like powertrains will be evaluated at vehicle level thanks to advanced dynamic models. The industrial feasibility, the portability on diesel engine and the cost estimation are also included in the as well as a preliminary packaging study to assure the on board integrability. The Project most important outcome will be a new powertrain concept based on a combined energy recovery, storage and re-use system integrated and optimised with the engine system and controls. The project will answer to the request to achieve an efficiency at vehicle level well above 50% at acceptable cost.	CENTRO RICERCHE FIAT SCPA	n/a
EU	Electric motor	MAG- DRIVE	New permanent magnets for electric- vehicle drive applications	FP7	MAG-DRIVE will research and develop novel microstructural-engineering strategies that will dramatically improve the properties of magnets based on light rare-earth elements, especially the coercivity, which will enable them to be used for EV applications above 100A°C. These magnets will also be designed-to- recycle, with an emphasis on reducing conventional rare-earth magnets' need for easily oxidising grain boundaries. The project will integrate these magnets into motors that have increased efficiency, with a system developed by VALEO for integration into their next generation of pure EV motor.	INSTITUT JOZEF STEFAN	http://mag- drive- fp7.eu/index .php
EU	Vehicle	PLUS- MOBY	Premium Low weight Urban Sustainable e- MOBilitY	FP7	The Plus-Moby project is focused to the implementation of low cost and low energy intensity technologies to manufacture premium four wheel fully electrical micro vehicles (450-650kg and speeds up to 90+ km/h)) that can be upgraded to M1 configurations.	BITRON SPA	http://www. moby- ev.eu/plusm oby/
EU	Electric motor	SYRNEM O	Synchronous Reluctance Next Generation Efficient Motors for Electric Vehicles	FP7	SyrNemo is an innovative synchronous reluctance machine (SYRM) with higher power density and higher driving cycle efficiency at lower cost than state of the art permanent magnet (PM) synchronous machines.	AIT Austrian Institute of Technology GmbH	http://www. syrnemo.eu/
EU	Vehicle	URBAN- EV	Super Light Architectures for Safe and Affordable Urban Electric Vehicles	FP7	URBAN-EV will apply innovative manufacturing technologies and materials to produce prototypes of a 2-seat urban electric vehicle with considerably enhanced autonomy vs. the SoTA EV of its kind, and a similar occupant safety level than normal passenger cars.	FRAUNHOFER- GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V	n/a
EU	Thermal manage ment	eDAS	Holistic Energy Management for third and fourth generation of EVs:\neDAS = efficiency powered by smart Design meaningful Architecture connected Systems	FP7	Through eDAS we will limit the negative impact of high and low environment temperatures from -50% today to a maximum of -20% of the reachable range in electric vehicles, which corresponds to an improvement of 60% compared to state of the art. We will bring the infrastructure of the EV to the optimum operating temperature range for faster "fast charging", pre-conditioned passenger compartment and battery, also safety and convenience features, such as de-iced windows during winter time based on the available infrastructure without adding cost and weight based on new designs and architecture combining battery, e- motor, electronics, charger and energy management.	INFINEON TECHNOLOGIES AG	http://www. edas-ev.eu/

Cou ntry of fund ing	Vehicle Compon ent	Abbrevi ation of the project	Name of the project	Co- funding body	Short description	Coodinator organization	Link
EU	Charger	FREE- MOBY	People Centric easy to implement e-mobility	FP7	The FREE-MOBY project is focused to the implementation of easy to deploy micro fully electrical vehicles (450-650kg and speeds up to 90+ km/h)) and city EVs (650-1000kg)	BITRON SPA	n/a
EU	Others	GO4SE M	Global Opportunities for SMEs in Electro- Mobility	FP7	The comprehensive approach is aimed at giving policy advice e.g. on standardization or education, at spreading awareness of global market trends and opportunities, and at triggering the creation of dedicated professional networks. It shall be based on a thorough analysis of the electric mobility supply chains in the United States, Japan, China and India, and on matching with the competencies of small and medium size companies and regional cluster thereof in Europe.	VRIJE UNIVERSITEIT BRUSSEL	http://www. go4sem.eu/ public
EU	Controls	iCOMPO SE	Integrated Control of Multiple- Motor and Multiple- Storage Fully Electric Vehicles	FP7	One of the main factors for energy efficiency enhancement in fully electric vehicles is systems integration. To achieve this, iCOMPOSE proposes a step change in the control software architecture with particular focus on comprehensive energy management.	Kompetenzzentrum - Das Virtuelle Fahrzeug, Forschungsgesellsch aft mbH	http://www. i- compose.eu /iCompose/
EU	Electric motor Controls	IMPROV E	Integration and Management of Performance and Road Efficiency of Electric Vehicle Electronics	FP7	IMPROVE focuses on in-vehicle ICT innovations for commercial (fleet operated) vehicles, which are in some aspects different from private passenger vehicles: different use cases, different trade-offs between comfort, driving dynamics and cost efficiency, and more embedded in a fleet of several vehicles.	Kompetenzzentrum - Das Virtuelle Fahrzeug, Forschungsgesellsch aft mbH	http://impro ve-fp7.eu/
EU	Energy Storage; Controls	INCOBA T	INnovative COst efficient management system for next generation high voltage BATteries	FP7	The aim of INCOBAT is to provide innovative and cost efficient battery management systems for next generation HV-batteries. To that end, INCOBAT will propose a platform concept in order to achieve cost reduction, reduced complexity, increased reliability as well as flexibility and higher energy efficiency	AVL LIST GMBH	http://www. incobat- project.eu/c ontact/
EU	Controls ; Vehicle	SafeAda pt	Safe Adaptive Software for Fully Electric Vehicles	FP7	The main idea of SafeAdapt is to develop novel architecture concepts based on adaptation to address the needs of a new F/E architecture for FEVs regarding safety, reliability and cost-efficiency	FRAUNHOFER- GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V	http://www. safeadapt.eu L
EU	Energy Storage	Batterie s2020	BATTERIES202 0: TOWARDS REALISTIC EUROPEAN COMPETITIVE AUTOMOTIVE BATTERIES	FP7	Project's approach is based on three parallel strategies: 1) highly focused materials development; 2) understanding ageing and degradation phenomena; and, 3) routes to reduce battery cost.	IKERLAN S.COOP.	http://www. batteries202 0.eu/contact .html

Cou ntry of fund ing	Vehicle Compon ent	Abbrevi ation of the project	Name of the project	Co- funding body	Short description	Coodinator organization	Link
EU	Energy Storage	MARS- EV	Materials for Ageing Resistant Li- ion High Energy Storage for the Electric Vehicle	FP7	MARS-EV aims to overcome the ageing phenomenon in Li-ion cells by focusing on the development of high- energy electrode materials (250 Wh/kg at cell level) via sustainable scaled-up synthesis and safe electrolyte systems with improved cycle life (> 3000 cycles at 100%DOD).	FUNDACION CIDETEC	http://www. mars- ev.eu/home page
EU	Energy Storage	MAT4BA T	Advanced materials for batteries	FP7	MAT4BAT builds-up its EVs battery strategy on advanced materials and pilot line processes, proposing three novel concepts of cells initiating from a state-of- the art combination of cell materials (NMC/Carbonate liquid electrolyte/Graphite). MAT4BAT will address all critical ageing mechanisms associated to this technology and having direct impacts on product lifetime & safety by implementing two work programs for Battery Assessment (#1) and Battery Technologies (#2).	COMMISSARIAT A L ENERGIE ATOMIQUE ET AUX ENERGIES ALTERNATIVES	http://mat4 bat.eu/
EU	Others	COTEVO S	Concepts, Capacities and Methods for Testing EV systems and their interOperabili ty within the Smartgrids	FP7	COTEVOS aims to develop optimal structures and capacities to test the conformance, interoperability and performance of the different systems to be included in the infrastructure for smart charging of Electric Vehicles.	FUNDACION TECNALIA RESEARCH & INNOVATION	http://cotev os.eu/
EU	Controls	AUTOMI CS	Pragmatic solution for parasitic- immune design of electronics ICs for automotive	FP7	Creation of a link between circuit design, modeling and implementation in innovative computer aided design tools. This concerns smart power IC's dedicated to automotive applications requiring co-integration of high voltage power stages with low voltage analog/digital blocks on the same chip, still being reliable when operating at high temperature.	UNIVERSITE PIERRE ET MARIE CURIE - PARIS 6	http://www. automics.eu L
EU	Controls Electric motor Energy Storage	AVTR	Optimal Electrical Powertrain via Adaptable Voltage and Transmission Ratio	FP7	ObjectiveAVTR addresses the development of the complete Electrical powertrain optimised as a whole of systems:- Energy saving in pure urban drive up to 20% with respect to state of-the-art fixed transmission ratio,- Avoid the use of Permanent Magnet Motors because non optimal elements when integrated in a multi ratios transmission PWT.	BITRON SPA	http://www. avtr- project.eu/
EU	Controls Thermal Manage ment	COSIVU	Compact, Smart and Reliable Drive Unit for Fully Electric Vehicles	FP7	The project 'COSIVU' aims at new system architectures for drive-train by developing a smart, compact and durable single-wheel drive unit with integrated electric motor, compact transmission, full SiC power electronics (switches and diodes), a novel control and health monitoring module with wireless communication, and an advanced ultra-compact cooling solution.	SWEREA IVF AB	http://www. cosivu.eu/te mplate.asp
EU	Others	eCo-FEV	efficient Cooperative infrastructure for Fully Electric Vehicles	FP7	The project aims at fulfilling the specific targeted outcome f): Integration of the FEV in the cooperative transport infrastructure. It proposes will develop an integrated IT platform that enables the connection and information exchanges between multiple infrastructure systems that are relevant to the FEV such as road IT infrastructure, EV backend infrastructure and EV charging infrastructure.	HITACHI EUROPE LIMITED	http://www. eco-fev.eu/

Cou ntry of fund ing	Vehicle Compon ent	Abbrevi ation of the project	Name of the project	Co- funding body	Short description	Coodinator organization	Link
EU	Controls	EMERAL D	Energy ManagEment and RechArging for efficient eLectric car Driving	FP7	EMERALD focuses on energy use optimisation and on the seamless integration of the FEV into the transport and energy infrastructure, by delivering clear advances over the state-of-the-art.	SOFTECO SISMAT SRL	http://www. fp7- emerald.eu/
EU	Controls Electric motor	HEMIS	Electrical powertrain HEalth Monitoring for Increased Safety of FEVs	FP7	HEMIS project has two major objectives. The first one is to design a Prognostic Health Monitoring System (PHMS), which will sense key physical characteristics related to the health state of the powertrain and the emitted EMF. The second objective is to provide the manufactures of FEVs with design guidelines regarding EMC and the impact of EMF (including LF emissions) on human health.	CENTRO DE ESTUDIOS E INVESTIGACIONES TECNICAS	http://www. hemis- eu.org/
EU	Controls	ODIN	Optimized electric Drivetrain by INtegration	FP7	This project aims to develop a compact, efficient, highly integrated electromechanical powertrain, production optimized to deliver key cost reduction goals.	ROBERT BOSCH GMBH	http://www. fp7-odin.eu/
EU	Others	Smart EV-VC	Smart Electric Vehicle Value Chains	FP7	The Smart EV-VC project will compile a dedicated implementation agenda in preparation of Horizon 2020, also aiming at coherences and complementarities of EU and members states programmes. It will cover strategic research, development and innovation for the FEV "made in Europe" with a particular focus on ICT and smart systems as key enabling technologies.	VDI/VDE INNOVATION + TECHNIK GMBH	http://www. smartev- vc.eu/
EU	Vehicle	ALIVE	Advanced High Volume Affordable Lightweightin g for Future Electric Vehicles	FP7	ALIVE will develop directly exploitable knowledge on materials and design concepts which offer a high potential for significantly reducing the weight of vehicles for affordable application to high productions volumes, focusing on next generation Electric Vehicles (EVs).	VOLKSWAGEN AG	http://www. project- alive.eu/
EU	Energy Storage	EUROLIS	Advanced European lithium sulphur cells for automotive applications	FP7		KEMIJSKI INSTITUT	http://www. eurolis.eu/
EU	Vehicle	EVolutio n	The Electric Vehicle revOLUTION enabled by advanced materials highly hybridized into lightweight components for easy integration and dismantling providing a reduced life cycle cost logic	FP7	The EVolution goal is to demonstrate the sustainable production of a 600 kg weight FEV by the end of 2015.	AALBORG UNIVERSITET	http://evolut ionproject.e u/contact

Cou ntry of fund ing	Vehicle Compon ent	Abbrevi ation of the project	Name of the project	Co- funding body	Short description	Coodinator organization	Link
EU	Energy Storage	LISSEN	Lithium Sulfur Superbattery Exploitating Nanotechnolo gy	FP7	This project is aimed to the identification and development of nanostructured electrode and electrolyte materials to promote the practical implementation of the very high energy lithium-sulfur battery.	CONSORZIO SAPIENZA INNOVAZIONE	<u>http://www.</u> lissen.eu/
EU	Energy Storage	NECOBA UT	New Concept of Metal-Air Battery for Automotive Application based on Advanced Nanomaterial S	FP7	The project objective is to develop a new concept of battery based on the metal/air technology that overcomes the energy density limitation of the li-ion battery used at present for electrical vehicles. This development is mainly focused in the synthesis and use of specific nanomaterials for the manufacturing of the electrodes of this battery. Also, the study of advanced cell designs, with the help of modelling and simulation tools, aims to improve the efficiency and durability of this battery.	FUNDACION TECNALIA RESEARCH & INNOVATION	http://www. necobaut.eu /home/hom e.php
EU	Energy Storage	STABLE	STable high- capacity lithium-Air Batteries with Long cycle life for Electric cars	FP7	This project focuses on innovations of battery anode, cathode, electrolyte materials and technologies, as well as assembly of batteries cells which are crucial on battery performance, cost and environmental impact. Improvement of lifetime and cyclability of Li-air batteries through finding highly active bifunctional catalysts to effectively regenerate batteries, protecting the Li anode from dendrites formation using suitable membranes and obtaining stable electrolyte with additives to render solubility of Li2O2 that blogs on cathode will be studied.	POLITECNICO DI TORINO	http://www. fp7- stable.com/
EU	Others	ASTERIC S	Ageing and efficiency Simulation & TEsting under Real world conditions for Innovative electric vehicle Components and Systems	FP7	Research in this project will focus on the development and validation of numerical simulation tools, virtual prototyping and advanced physical testing procedures and on the standardization of such tools	AVL LIST GMBH	http://www. asterics- project.eu/
EU	Vehicle	ENLIGHT	Enhanced Lightweight Design	FP7	ENLIGHT aims to accelerate the technological development of a portfolio of innovative thermoset, thermoplastic, bio-based and hybrid materials which together offer a strong potential to reduce weight and overall carbon footprint to enable their viable application to medium-high volume EVs in 2020-25.	FRAUNHOFER- GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V	http://www. project- enlight.eu
EU	Infrastru cture	FastInCh arge	Innovative fast inductive charging solution for electric vehicles	FP7	The concept of FastInCharge is to create a highly performing inductive solution which will enable a 40 kW power transfer to the vehicles in two charging operational situations: one stationary and one on- route.	DOUAISIENNE DE BASSE TENSION SAS	http://www. fastincharge. eu/
EU	Vehicle	MATISS E	Modelling And Testing for Improved Safety of key composite StructurEs in alternatively powered vehicles	FP7	MATISSE aims to make a significant step forward in the capability of the automotive industry to model, predict and optimise the crash behaviour of mass produced Fibre Reinforced Polymer (FRP) composite structures, which will be extensively used in Alternatively Powered Vehicles.	fka Forschungsgesellsch aft Kraftfahrwesen mbH Aachen	http://www. project- matisse.eu/

Cou ntry of fund ing	Vehicle Compon ent	Abbrevi ation of the project	Name of the project	Co- funding body	Short description	Coodinator organization	Link
EU	Vehicle	OPTIMO RE	Optimised Modular Range Extender for every day customer usage	FP7	The OptiMoRE project takes on the challenge to develop and optimise the concept of the fully integrated, range-extended, electrified light duty vehicle. Three different RE concepts will be developed and demonstrated to serve the niches from city vehicles, medium sized passenger cars up to light commercial vehicles.	AVL LIST GMBH	http://www. optimore- project.eu/
EU	Vehicle Safety	SafeEV	Safe Small Electric Vehicles through Advanced Simulation Methodologie S	FP7	SafeEV aims based on future accident scenarios to define advanced test scenarios and evaluation criteria for VRU, occupant safety and compatibility of SEVs	Kompetenzzentrum - Das Virtuelle Fahrzeug, Forschungsgesellsch aft mbH	http://www. project- safeev.eu/de L
EU	Infrastru cture	UNPLUG GED	Wireless charging for Electic Vehicles	FP7	UNPLUGGED project aims to investigate how the use of inductive charging of Electric Vehicles (EV) in urban environments improves the convenience and sustainability of car-based mobility	FKA FORSCHUNGSGESEL LSCHAFT KRAFTFAHRWESEN MBH AACHEN	<u>http://unplu</u> <u>gged-</u> project.eu/w ordpress/
EU	Energy storage	ALPSTO RE	Strategies to use a variety of mobile and stationary storages to allow for extended accessibility and the integration of renewable ener	Alpine Space	Partners in 7 countries create master plans for the deployment of storages. Pilot tests will show the feasibility of mobile and stationary storage in public infrastructure, business parks, enterprises and smart homes. From there guidelines for planners and decision makers will be derived.	B.A.U.M Consult GmbH	http://corpor ate.vattenfa II.se/om- oss/var- verksamhet /var- forskning- och- utveckling/
EU	Energy storage	ABATTR ELIFE	Automotive Battery Recycling and 2 nd Life	ERA-Net Transport Electrom obility+ Program me	The main objective of the project is the development and implementation of a knowledge base on high voltage traction battery deterioration; a safe management structure for EV battery recycling; strategies and technologies for battery re-use and recycling	Peugeot Citroën Automobiles SA	<u>http://www.</u> abattrelife.e <u>u/</u>
EU	Others	EMDA_L OOP	OPTIMAL LOW-NOISE ENERGY- EFFICIENT ELECTRICAL MACHINES AND DRIVES FOR AUTOMOTIVE APPLICATION S	FP7	The main objective of EMDA_LOOp is to enhance technological know-how and transfer of knowledge in the field of electrical machines and drives for automotive applications.	UNIVERSITATEA TEHNICA CLUJ- NAPOCA	http://cordis .europa.eu/ project/rcn/ 106670_en. html
EU	Others	DEMOT EST-EV	DEsign, MOdelling and TESTing tools for Electrical Vehicles powertrain drives	FP7	The main objective of DeMoTest-EV aims the development of advanced and extended design, modelling and testing tools for improved concept modelling and for higher prediction accuracy of noise and vibration generated by EVs powertrain.	UNIVERSITATEA TEHNICA CLUJ- NAPOCA	http://www. demotest- ev.com/
EU	Electric	VENUS	Switched/Syn chronous Reluctance Magnet-free Motors for Electric Vehicles	FP7	The aim of this project is to develop both axial-flux SRMs and PMSynRMs in parallel (meeting EV power density requirements), exploiting their commonalities and synergies in the design and prototyping phases, to further opt for the most suitable solution to be integrated in commercial EV-s	FUNDACION TEKNIKER	http://cordis .europa.eu/ project/rcn/ 110532 en. html

Cou ntry of fund ing	Vehicle Compon ent	Abbrevi ation of the project	Name of the project	Co- funding body	Short description	Coodinator organization	Link
EU	Energy storage	MEMLA B	Melt Spun and Sintered Metal Fibre Networks for Lead-Acid Battery Advancement	FP7	The project will use state-of-the-art fibre production technology to create titanium and aluminium fibre networks. These will be coated in lead and lead oxide. The objective is to achieve a greater than 50% reduction in the overall weight of a lead-acid battery thereby significantly increasing their power to weight ratio making them a realistic alternative for application in hybrid electric vehicles.	FIBRE TECHNOLOGY LIMITED	http://www. memlab.eu/
EU	Energy storage	SPEED	Silicon Carbide Power Technology for Energy Eficient Devices	FP7	<ul> <li>Suitable SiC substrates, epitaxial-layers, and HV devices shall be developed and eventually be implemented in two demonstrators:</li> <li>A cost-efficient solid-state transformer to support advanced grid smartness and power quality.</li> <li>A windmill power converter with improved capabilities for generating AC and DC power.</li> </ul>	INAEL ELECTRICAL SYSTEMS SA	http://www. speed- fp7.org/
EU	Energy storage	ICAB	Integrated Circuit for Advanced Battery Management	FP7	The main innovation behind this project relies on the development of a BMS technology that significantly advances beyond state of the art, and aims at reducing the high component count and overall price, through the use of ASIC technology. The developed solution will therefore leverage the incorporation of premium technologies in higher volume (lower cost) products.	LITHIUM BALANCE A/S	http://www. icab- project.eu/
SE	Infrastru cture	ELVIIS		Region Västra Götaland, Göteborg Energi Foundatio n for Research and Developm ent and Swedish ICT	The solution uses the mobile telecom network to coordinate the charging of cars, which increases the efficiency of the grid. The driver decides how and when to charge the car. The information is sent over the mobile network to a system that determines the best time for charging, based on the lowest cost and current demand on the grid. After that, the driver's bill is charged, no matter which power outlet is used. At present, the driver needs to enter a specific power outlet ID, but eventually, it will be possible to use the car's satellite navigation device to identify nearby outlets.	Viktoria Swedish ICT	https://www .viktoria.se/ projects/elvii <u>s</u>
EU	Electric motor Chassis	EUNICE	Eco-design and Validation of In-Wheel Concept for Electric Vehicles	FP7	The main objective of this proposal is the design, development and validation of a complete in wheel motor assembly prototype (electric motor, power electronics, reduction gear, structural parts and wheel), based on a McPherson corner suspension topology, to meet the defined car top level specifications.	FUNDACION TECNALIA RESEARCH & INNOVATION	http://www. eunice- project.eu/ work_packa ges.aspx
EU	Safety Others	EVERSA FE	Everyday Safety for Electric Vehicles	ERA-Net Transport Electrom obility+ Program me	The overall objective of the project is to provide safety requirements for electrically propelled vehicles, thus answering the current need for standardization within this area.	Swedish National Road and Transportation Research Institute (VTI)	http://www. eversafe- project.eu/
EU	Others	EVREST	Electric Vehicle withRange Extender as a SustainableTe chnology	ERA-Net Transport Electrom obility+ Program me	The main idea of EVREST project is to study how ElectricVehicles (EV) with a Range Extender (RE) could match thedifferent usage patterns while decreasing the battery size(cost), fulfilling occasional long trips and ensuring the userto reach his destination in case of battery failure.	IFSTTAR-LTE	http://www. evrest- project.org/ schedule.p hp
EU	Others	NEMO	Novel E- Mobility Grid Model	ERA-Net Transport Electrom obility+ Program me	The project team's goal is to develop the NEMO simulation and optimisation tool suite to assess the impact of a large number of EVs on the power grid.	KEMA Nederland B.V.	http://www. nemo- project.eu/

Cou ntry of fund ing	Vehicle Compon ent	Abbrevi ation of the project	Name of the project	Co- funding body	Short description	Coodinator organization	Link
EU	Vehicle	MATLEV	New materials and technologies for lightweight generic components of electric low-emission concept vehicle	ERA-Net Transport Electrom obility+ Program me	The main goal of the project is to design and offer new solutions in the field of vehicle architecture, based on innovative structural and functional materials.	Warsaw University of Technology	http://matle v.eu/
EU	Energy storage	MALISU	Nanomaterial s for future generation Lithium Sulphur batteries	ERA-Net Transport Electrom obility+ Program me	Aim of the project is the development of next generation batteries with significantly enhanced energy densities based on the lithium sulfur chemistry.	Fraunhofer IWS	http://electr omobility- plus.eu/wp- content/upl oads/malisu. pdf
EU	Energy storage; Charger	K-VEC	Ultrafast and distributed power charge system for high performance on-board energy storage devices	ERA-Net Transport Electrom obility+ Program me	K-VEC is a smart and cost-effective conductive fast charge system between a road infrastructure and an electric vehicle.	Sequoia Automation S.r.I	http://fgpro gu.uni- wuppertal.d e/1968.0.ht ml
DK	Chassis	CIPED	Compact Intelligent Powerful Electric Drivetrain for Evs	Danish Energy Agency	The purpose of CIPED (Compact Intelligent Powerful Electric Drivetrain for EVs) is to develop an InWheel drivetrain to be fitted on electric, hybrid and fuel cell vehicles. The system will include	ECOMOVE ApS	http://www. ciped.dk/
DK	Energy storage	ACEMU		Danish Council for Strategic Research, Program me Commissi on on Transport and Infrastruc ture	The consortium wishes to address issues of space and weight limitations by conducting research in lithium- sulfur batteries (Li-S) which have an up to five times higher theoretically specific energy than traditional lithium-ion batteries. The goal is also to put the unit and the technology into perspective through the related business cases with regard to the markets of different stakeholders.	Aalborg University	http://ufm.d k/en/researc h-and- innovation/f unding- programmes -for- research- and- innovation/ who-has- received- funding/201 3/grants- from-the- danish- council-for- strategic- research- programme- commission- on- transport- and- infrastructur e-2013

Cou ntry of fund ing	Vehicle Compon ent	Abbrevi ation of the project	Name of the project	Co- funding body	Short description	Coodinator organization	Link
EU	Charger	FABRIC	FeAsiBility analysis and development of on-Road charging solutions for future electric vehiCles	FP7	FABRIC addresses directly the technological feasibility, eomic viability and socio-environmental of dynamic on-road charging of electric vehicles. FABRIC responds to the need to assess the potential and feasibility of a more extensive integration of electric vehicles in the mobility and transportation system, focusing primarily on dynamic wireless charging which would allow practically all of the drawbacks of on-board battery packs to be avoided.	INSTITUTE OF COMMUNICATION AND COMPUTER SYSTEMS, ATHINA, Greece	http://www.f abric- project.eu/
EU	Others	MOBINC ITY	MOBINCITY	FP7	MOBINCITY aims at the optimization of FEV autonomy range and the increase in energy efficiency thanks to the development of a complete ICT-based integrated system able to interact between driver, vehicle and transport and energy infrastructures, taking advantage of the information provided from these sources in order to optimise both energy charging and discharging processes (trip planning and routing)		http://www. mobincity.e u/
NO	Others	DNV Fuel fighter	DNV Fuel fighter	TRANSNO VA - Governati ve Organzati on	DNV Fuel Fighter develops two energy-efficient electric cars built by students at NTNU. The goal is to attend and win the Shell Eco-Marathon in 2014 with both cars.		http://www.t ransnova.n o/project/dn v-fuel- fighter- 2014/
EU, AT, DE, PL	Others	DEFINE	DEFINE	ERA-Net Transport Electrom obility+ Program me	The project focuses on the costs and benefits of introducing electromobility in three European Countries: Poland, Austria and Germany. Electromobility is often proposed to be the solution for the problem of combining individual transportation with an ecologically sustainable development.		http://www. ea.tuwien.a c.at/projekt e/define/
NO	Charger	ZAP Charger - ladestaj on for elkjoret oy	ZAP Charger - ladestajon for elkjoretoy	TRANSNO VA - Governati ve Organzati on	Faster charging possibilities.		http://www.t ransnova.n o/project/za p-charger- ladestasjon -for- elkjoretoy/
EU	Others	POWER UP	POWERUP	FP7	PowerUp aims to develop the Vehicle-2-Grid (V2G) interface, involving a full development cycle of physical/link-layer specification, charging control protocol design, prototyping, conformance testing, field trials, and standardisation. Its results will ensure that FEVs smoothly integrate into emerging smart-grid networks.		http://www. power- up.org/
EU, NL, DE	Charger	DAME	DAME	ERA NET (EU) + Countries	The DAME project focuses on strategic research on technical aspects of charging and distribution systems, and more specifically on the research topic Managing the Power Grid. Therefore, it takes a distribution network operator's perspective to identify and examine the specific challenges of the integration of electromobility.		http://electr omobility- plus.eu/wp- content/upl oads/electro mobility/lau nching semi nar/34 DAM E Presentati on DAME3. pdf
EU, DE, PL	Others	CACTUS	CACTUS	ERA-Net Transport Electrom obility+ Program me	In the CACTUS project, considerations concerning techniques for fully electric busses will be made to decide which best fits a public transport company's needs. This requires a series of detailed questions to be answered.		http://www. cactus- emobility.eu Ĺ

Cou ntry of fund ing	Vehicle Compon ent	Abbrevi ation of the project	Name of the project	Co- funding body	Short description	Coodinator organization	Link
AT	Others	emporA – E- Mobile Power Austria		Climate and Energy Fund of the Federal Governm ent	EMPORA - E-Mobile Power Austria consists of two research projects with a total project cost of EUR 26 million, making it the largest cooperative R & D project in Austria. EMPORA is funded by the Climate and Energy Fund of the Federal Government (from the 1st and 2nd Call "Lighthouses Electric Mobility"). 22 Austrian project partners cover the entire value chain of electric mobility. The project consortium, composed of leading companies from industry and research, allowing the electric mobility include edit and develop both technological, and organizational solutions for a complete system.		http://www. empora.eu/
AT	Infrastru cture	ICT - softwar e develop mnet	Sorglos		The research project "SORGLOS" therefore is aimed at developing methods and algorithms to achieve blackout proof network segments (Microgrids) using installed decentralized generation and storage as well as already installed Smart Grid technologies. For the project, black start capability or safe decoupling following a blackout, control of generation and demand side as well as storage management are investigated as well as support for network supply restoration. Moreover, the project "SORGLOS" focusses on legal frameworks and economic potential of such methods.		http://www. ea.tuwien.a c.at/project s/sorglos/E <u>N/</u>

## Annex II

## Demonstration projects in excel files

Funding Country	City/Regi on/Coun try	Project name and abbreviation	Co-funding body	Description	Link
EU	Amsterda m (NL)	FREVUE	FP7	Eight of Europe's largest cities, will demonstrate that electric vehicles operating "last mile" freight movements in urban centres can offer significant and achievable decarbonisation of the European transport system.	http://frevue.eu/
EU	Lisbon (PT)	FREVUE	FP7	Eight of Europe's largest cities, will demonstrate that electric vehicles operating "last mile" freight movements in urban centres can offer significant and achievable decarbonisation of the European transport system.	http://frevue.eu/
EU	London (UK)	FREVUE	FP7	Eight of Europe's largest cities, will demonstrate that electric vehicles operating "last mile" freight movements in urban centres can offer significant and achievable decarbonisation of the European transport system.	http://frevue.eu/
EU	Madrid (ES)	FREVUE	FP7	Eight of Europe's largest cities, will demonstrate that electric vehicles operating "last mile" freight movements in urban centres can offer significant and achievable decarbonisation of the European transport system.	http://frevue.eu/
EU	Milan (IT)	FREVUE	FP7	Eight of Europe's largest cities, will demonstrate that electric vehicles operating "last mile" freight movements in urban centres can offer significant and achievable decarbonisation of the European transport system.	http://frevue.eu/
EU	Rotterda m (NL)	FREVUE	FP7	Eight of Europe's largest cities, will demonstrate that electric vehicles operating "last mile" freight movements in urban centres can offer significant and achievable decarbonisation of the European transport system.	http://frevue.eu/
EU	Oslo (NO)	FREVUE	FP7	Eight of Europe's largest cities, will demonstrate that electric vehicles operating "last mile" freight movements in urban centres can offer significant and achievable decarbonisation of the European transport system.	http://frevue.eu/
EU	Stockhol m (SE)	FREVUE	FP7	Eight of Europe's largest cities, will demonstrate that electric vehicles operating "last mile" freight movements in urban centres can offer significant and achievable decarbonisation of the European transport system.	http://frevue.eu/

Funding Country	City/Regi on/Coun try	Project name and abbreviation	Co-funding body	Description	Link
EU	Brussels (BE)	STRAIGHTSOL	FP7	The objectives of STRAIGHTSOL are threefold: 1) Develop a new impact assessment framework for measures applied to urban- interurban freight transport interfaces. 2) Support a set of innovative field demonstrations showcasing improved urban- interurban freight operations in Europe. 3) Apply the impact assessment framework to the live demonstrations and develop specific recommendations for future freight policies and measures.	http://www.straightsol.e u/
EU	Barcelon a (ES)	STRAIGHTSOL	FP7	The objectives of STRAIGHTSOL are threefold: 1) Develop a new impact assessment framework for measures applied to urban- interurban freight transport interfaces. 2) Support a set of innovative field demonstrations showcasing improved urban- interurban freight operations in Europe. 3) Apply the impact assessment framework to the live demonstrations and develop specific recommendations for future freight policies and measures.	http://www.straightsol.e u/
EU	Thessalo niki (GR)	STRAIGHTSOL	FP7	The objectives of STRAIGHTSOL are threefold: 1) Develop a new impact assessment framework for measures applied to urban- interurban freight transport interfaces. 2) Support a set of innovative field demonstrations showcasing improved urban- interurban freight operations in Europe. 3) Apply the impact assessment framework to the live demonstrations and develop specific recommendations for future freight policies and measures.	http://www.straightsol.e u/
EU	Lisbon (PT)	STRAIGHTSOL	FP7	The objectives of STRAIGHTSOL are threefold: 1) Develop a new impact assessment framework for measures applied to urban- interurban freight transport interfaces. 2) Support a set of innovative field demonstrations showcasing improved urban- interurban freight operations in Europe. 3) Apply the impact assessment framework to the live demonstrations and develop specific recommendations for future freight policies and measures.	http://www.straightsol.e u/
EU	Oslo (NO)	STRAIGHTSOL	FP7	The objectives of STRAIGHTSOL are threefold: 1) Develop a new impact assessment framework for measures applied to urban- interurban freight transport interfaces. 2) Support a set of innovative field demonstrations showcasing improved urban- interurban freight operations in Europe. 3) Apply the impact assessment framework to the live demonstrations and develop specific recommendations for future freight policies and measures.	http://www.straightsol.e u/

Funding Country	City/Regi on/Coun try	Project name and abbreviation	Co-funding body	Description	Link
EU	south of England (UK)	STRAIGHTSOL	FP7	The objectives of STRAIGHTSOL are threefold: 1) Develop a new impact assessment framework for measures applied to urban- interurban freight transport interfaces. 2) Support a set of innovative field demonstrations showcasing improved urban- interurban freight operations in Europe. 3) Apply the impact assessment framework to the live demonstrations and develop specific recommendations for future freight policies and measures.	http://www.straightsol.e u/
ES	ES	Zero Emissions Mobility To All			http://www.zem2all.co m/
CZ	CZ	EV pilot project of the CEZ Group			<u>http://www.elektromobi</u> <u>lita.cz/</u>
EU	Sundsvall (SE)	GREEN HIGHWAY	Interreg, EU		http://www.greenhighw ay.se/
EU	Östersun d (SE)	GREEN HIGHWAY	Interreg, EU		http://www.greenhighw ay.se/
EU	Trondhei m (NO)	GREEN HIGHWAY	Interreg, EU		http://www.greenhighw ay.se/
SE	Gothenb urg	Charging EVs in Gothenburg			http://www.goteborgen ergi.se/Privat/Projekt_oc h_etableringar/Laddning for_eldrivna_fordon
UE, UK	Bristol	Source West	EU, UK's Local Sustainable Transport Fund (LSTF)	ource West, which is funded by Bristol City Council through the UK's Local Sustainable Transport Fund (LSTF), promotes the introduction of electric vehicles (EVs) into the South West including Bristol City, Bath and North East Somerset, and the Counties of South Gloucestershire, North Somerset and Gloucestershire.	http://www.sourcewest. info/
EU	Barcelon a (ES)	MOBILITY 2.0	FP7	Mobility2.0 will develop and test an in-vehicle commuting assistant for FEV mobility, resulting in more reliable and energy-efficient electro-mobility. In order to achieve a maximum impact, Mobility2.0 takes an integrated approach of addressing the main bottlenecks of urban FEV mobility: 'range anxiety' related to the limited FEV range, scarcity of parking spaces with public recharging spots, and the congestion of urban roads.	<u>http://mobility2.eu/?pa</u> <u>ge_id=6</u>
EU	Reggio Emilia (IT)	MOBILITY 2.0	FP7	Mobility2.0 will develop and test an in-vehicle commuting assistant for FEV mobility, resulting in more reliable and energy-efficient electro-mobility. In order to achieve a maximum impact, Mobility2.0 takes an integrated approach of addressing the main bottlenecks of urban FEV mobility: 'range anxiety' related to the limited FEV range, scarcity of parking spaces with public recharging spots, and the congestion of urban roads.	http://mobility2.eu/?pa ge_id=6

Funding Country	City/Regi on/Coun try	Project name and abbreviation	Co-funding body	Description	Link
EU	Barcelon a (ES)	BEAMS	FP7	BEAMS strategic goal is the development of an advanced, integrated management system which enables energy efficiency in buildings and special infrastructures from a holistic perspective (i.e. considering the indoors areas, the public spaces around the facility and the interaction of the overall compound with the grid and urban network outside it	http://ict-beams.eu/
EU	Lecce (IT)	BEAMS	FP7	BEAMS strategic goal is the development of an advanced, integrated management system which enables energy efficiency in buildings and special infrastructures from a holistic perspective (i.e. considering the indoors areas, the public spaces around the facility and the interaction of the overall compound with the grid and urban network outside it	<u>http://ict-beams.eu/</u>
EU	Noord Brabant (NL)	ENEVATE	Interreg, EU	ENEVATE aim is to facilitate an accelerated introduction of electric mobility in North-West Europe (NWE) through structured transnational cooperation between public authorities and business representatives. The project wants to boost innovation and competitiveness of the rapidly developing electric vehicle sector in NWE and at the same time to contribute to the urgent environmental challenge of reducing CO2 emissions.	http://www.enevate.eu/
EU	Montbeli ard (F)	ENEVATE	Interreg, EU	ENEVATE aim is to facilitate an accelerated introduction of electric mobility in North-West Europe (NWE) through structured transnational cooperation between public authorities and business representatives. The project wants to boost innovation and competitiveness of the rapidly developing electric vehicle sector in NWE and at the same time to contribute to the urgent environmental challenge of reducing CO2 emissions.	http://www.enevate.eu/
EU	Haute Normand ie (F)	ENEVATE	Interreg, EU	ENEVATE aim is to facilitate an accelerated introduction of electric mobility in North-West Europe (NWE) through structured transnational cooperation between public authorities and business representatives. The project wants to boost innovation and competitiveness of the rapidly developing electric vehicle sector in NWE and at the same time to contribute to the urgent environmental challenge of reducing CO2 emissions.	http://www.enevate.eu/
EU	North East of England	ENEVATE	Interreg, EU	ENEVATE aim is to facilitate an accelerated introduction of electric mobility in North-West Europe (NWE) through structured transnational cooperation between public authorities and business representatives. The project wants to boost innovation and competitiveness of the rapidly developing electric vehicle sector in NWE and at the same time to contribute to the urgent environmental challenge of reducing CO2 emissions.	http://www.enevate.eu/

Funding Country	City/Regi on/Coun try	Project name and abbreviation	Co-funding body	Description	Link
EU	Ireland	ENEVATE	Interreg, EU	ENEVATE aim is to facilitate an accelerated introduction of electric mobility in North-West Europe (NWE) through structured transnational cooperation between public authorities and business representatives. The project wants to boost innovation and competitiveness of the rapidly developing electric vehicle sector in NWE and at the same time to contribute to the urgent environmental challenge of reducing CO2 emissions.	http://www.enevate.eu/
EU	DE	e-mobility-nsr.eu	Interreg, EU	The project North Sea Region Electric Mobility Network (E-Mobility NSR) provides state of the art information which may help policy development in e-mobility in the NSR. It also provides insight into the gaps and needs in respect of infrastructure, logistics and preliminary standards for multi charging techniques.	http://e-mobility-nsr.eu/
EU	Aberdee n (UK)	e-harbours	Interreg, EU	E-Harbours aims to create a lasting change towards sustainable energy logistics for NSR harbour cities. It will set innovative energy standards to create a transformation of the energy network in harbour areas.	http://eharbours.eu/
EU	Amsterda m (NL)	e-harbours	Interreg, EU	E-Harbours aims to create a lasting change towards sustainable energy logistics for NSR harbour cities. It will set innovative energy standards to create a transformation of the energy network in harbour areas.	http://eharbours.eu/
EU	Antwerp (BE)	e-harbours	Interreg, EU	E-Harbours aims to create a lasting change towards sustainable energy logistics for NSR harbour cities. It will set innovative energy standards to create a transformation of the energy network in harbour areas.	http://eharbours.eu/
EU	Hamburg (DE)	e-harbours	Interreg, EU	E-Harbours aims to create a lasting change towards sustainable energy logistics for NSR harbour cities. It will set innovative energy standards to create a transformation of the energy network in harbour areas.	http://eharbours.eu/
EU	Malmo (SE)	e-harbours	Interreg, EU	E-Harbours aims to create a lasting change towards sustainable energy logistics for NSR harbour cities. It will set innovative energy standards to create a transformation of the energy network in harbour areas.	http://eharbours.eu/
EU	Scallowa y (UK)	e-harbours	Interreg, EU	E-Harbours aims to create a lasting change towards sustainable energy logistics for NSR harbour cities. It will set innovative energy standards to create a transformation of the energy network in harbour areas.	http://eharbours.eu/

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EU	Zaanstad (NL)	e-harbours	Interreg, EU	E-Harbours aims to create a lasting change towards sustainable energy logistics for NSR harbour cities. It will set innovative energy standards to create a transformation of the energy network in harbour areas.	http://eharbours.eu/
EU	EU	E-GOMOTION	FP7	e-gomotion aims to bring together a consortium of five leading European universities (four since 15/04/2013 due to Chalmers termination) with experience of, and commitment to, the shift to an electric road transport sector, and coordinate their efforts in joint activities designed for the purposes of:- Evaluating and demonstrating job creation in the electrification sector;- Encouraging young persons to seek jobs in electrification of road transport; and- Arranging communication and stimulation campaigns targeting young persons.	http://www.e- gomotion.eu/about
EU	Not specified areas of Ireland (IE)	PLANGRIDEV	FP7	The overall objective of PlanGridEV is therefore to develop new network planning tools and methods for European DSOs for an optimized large-scale roll-out of electromobility in Europe whilst at the same time maximizing the potential of DER integration. The project will also identify gaps in current network operation procedures and update tools and methods to address local load and congestion issues, leveraging on the possibilities of managing EV as controllable loads.	<u>http://www.plangridev.</u> <u>eu/</u>
EU	Not specified areas of Portugal (PT)	PLANGRIDEV	FP7	The overall objective of PlanGridEV is therefore to develop new network planning tools and methods for European DSOs for an optimized large-scale roll-out of electromobility in Europe whilst at the same time maximizing the potential of DER integration. The project will also identify gaps in current network operation procedures and update tools and methods to address local load and congestion issues, leveraging on the possibilities of managing EV as controllable loads.	http://www.plangridev. eu/

Funding Country	City/Regi on/Coun try	Project name and abbreviation	Co-funding body	Description	Link
EU	Not specified areas of Germany (DE)	PLANGRIDEV	FP7	The overall objective of PlanGridEV is therefore to develop new network planning tools and methods for European DSOs for an optimized large-scale roll-out of electromobility in Europe whilst at the same time maximizing the potential of DER integration. The project will also identify gaps in current network operation procedures and update tools and methods to address local load and congestion issues, leveraging on the possibilities of managing EV as controllable loads.	<u>http://www.plangridev.</u> <u>eu/</u>
EU	Not specified areas of Italy (IT)	PLANGRIDEV	FP7	The overall objective of PlanGridEV is therefore to develop new network planning tools and methods for European DSOs for an optimized large-scale roll-out of electromobility in Europe whilst at the same time maximizing the potential of DER integration. The project will also identify gaps in current network operation procedures and update tools and methods to address local load and congestion issues, leveraging on the possibilities of managing EV as controllable loads.	http://www.plangridev. eu/
EU	Newcastl e (UK)	SMARTFUSION	FP7	The SMARTFUSION public-private partnership (PPP) will build upon existing urban freight development strategies of three demonstration regions and to demonstrate smart urban freight solutions on co-operative and sustainable city distribution in urban interurban supply chains.	http://www.smartfusion .eu/
EU	Como (IT)	SMARTFUSION	FP7	The SMARTFUSION public-private partnership (PPP) will build upon existing urban freight development strategies of three demonstration regions and to demonstrate smart urban freight solutions on co-operative and sustainable city distribution in urban interurban supply chains.	<u>http://www.smartfusion</u> . <u>eu/</u>
EU	Berlin (DE)	SMARTFUSION	FP7	The SMARTFUSION public-private partnership (PPP) will build upon existing urban freight development strategies of three demonstration regions and to demonstrate smart urban freight solutions on co-operative and sustainable city distribution in urban interurban supply chains.	http://www.smartfusion .eu/

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EU	Barcelon a and Catalonia Region (ES)	MyWay	FP7	MyWay will investigate, develop and validate an integrated platform, the European Smart Mobility Resource Manager, including cloud- based services and facilities to support community supplied information collection and processing. The purpose is to holistically address the efficient and seamless integration and use of complementary, capacity-limited mobility services in the overall urban travel chain, including all transport modes (motorised and non-motorised, EVs, public transport, flexible services such as transport on-demand) and mobility sharing schemes (e.g. car sharing, motorbike sharing and carpooling).	http://myway- project.eu/
EU	Berlin (DE)	MyWay	FP7	MyWay will investigate, develop and validate an integrated platform, the European Smart Mobility Resource Manager, including cloud- based services and facilities to support community supplied information collection and processing. The purpose is to holistically address the efficient and seamless integration and use of complementary, capacity-limited mobility services in the overall urban travel chain, including all transport modes (motorised and non-motorised, EVs, public transport, flexible services such as transport on-demand) and mobility sharing schemes (e.g. car sharing, motorbike sharing and carpooling).	<u>http://myway-</u> project.eu/
EU	Trikala (GR)	МуWay	FP7	MyWay will investigate, develop and validate an integrated platform, the European Smart Mobility Resource Manager, including cloud- based services and facilities to support community supplied information collection and processing. The purpose is to holistically address the efficient and seamless integration and use of complementary, capacity-limited mobility services in the overall urban travel chain, including all transport modes (motorised and non-motorised, EVs, public transport, flexible services such as transport on-demand) and mobility sharing schemes (e.g. car sharing, motorbike sharing and carpooling).	http://myway- project.eu/

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СН	СН	THELMA		THELMA is a technology-based, integrated assessment of electric vehicles' potential in the Swiss transport sector. The environmental, economic and social performance of a range of current and future electric and non-electric vehicles is combined with forecast transport demand, fleet penetration scenarios and charging patterns to model changes in the Swiss grid's net demand, cost and reliability	<u>http://www.thelma-</u> <u>emobility.net/</u>
NL	Almere	Zero-Emission Urban Distribution		The deployment of 100 percent electric lorries active in urban distribution (e.g.,moving house, delivering food products, delivering packages).The charging infrastructure (380V, 64A) will be installed at the distributors' sites. Theproject is currently looking for quality suppliers of suitable charging infrastructure.Nine electric Hytruck freight vehicles have been ordered. The vehicles weigh 12–18tonnes and have a range of 150– 250 kilometres (120–240 kWh battery). The firstvehicles are scheduled to be delivered starting in the fall of 2013.	http://nederlandelektris ch.nl/fileadmin/klanten/ ivdm/Nederland Elektris ch/Downloads/Interim Evaluation Hybrid and Electric Driving Demon strations Project 2013. pdf
NL	Amsterda m	Zero-Emission Urban Distribution		The deployment of 100 percent electric lorries active in urban distribution (e.g., moving house, delivering food products, delivering packages). The charging infrastructure (380V, 64A) will be installed at the distributors' sites. The project is currently looking for quality suppliers of suitable charging infrastructure. Nine electric Hytruck freight vehicles have been ordered. The vehicles weigh 12–18 tonnes and have a range of 150–250 kilometres (120–240 kWh battery). The first vehicles are scheduled to be delivered starting in the fall of 2013.	http://nederlandelektris ch.nl/fileadmin/klanten/ ivdm/Nederland Elektris ch/Downloads/Interim Evaluation Hybrid and Electric Driving Demon strations Project 2013. pdf
NL	Arnhem	Zero-Emission Urban Distribution		The deployment of 100 percent electric lorries active in urban distribution (e.g., moving house, delivering food products, delivering packages).The charging infrastructure (380V, 64A) will be installed at the distributors' sites. Theproject is currently looking for quality suppliers of suitable charging infrastructure.Nine electric Hytruck freight vehicles have been ordered. The vehicles weigh 12–18tonnes and have a range of 150– 250 kilometres (120–240 kWh battery). The firstvehicles are scheduled to be delivered starting in the fall of 2013.	http://nederlandelektris ch.nl/fileadmin/klanten/ ivdm/Nederland Elektris ch/Downloads/Interim Evaluation Hybrid and Electric Driving Demon strations Project 2013. pdf

Funding Country	City/Regi on/Coun try	Project name and abbreviation	Co-funding body	Description	Link
NL	Beverwij k	Zero-Emission Urban Distribution		The deployment of 100 percent electric lorries active in urban distribution (e.g., moving house, delivering food products, delivering packages). The charging infrastructure (380V, 64A) will be installed at the distributors' sites. The project is currently looking for quality suppliers of suitable charging infrastructure. Nine electric Hytruck freight vehicles have been ordered. The vehicles weigh 12–18 tonnes and have a range of 150–250 kilometres (120–240 kWh battery). The first vehicles are scheduled to be delivered starting in the fall of 2013.	http://nederlandelektris ch.nl/fileadmin/klanten/ ivdm/Nederland Elektris ch/Downloads/Interim Evaluation Hybrid and Electric Driving Demon strations Project 2013. pdf
NL	Castricu m	Zero-Emission Urban Distribution		The deployment of 100 percent electric lorries active in urban distribution (e.g., moving house, delivering food products, delivering packages). The charging infrastructure (380V, 64A) will be installed at the distributors' sites. Theproject is currently looking for quality suppliers of suitable charging infrastructure. Nine electric Hytruck freight vehicles have been ordered. The vehicles weigh 12–18tonnes and have a range of 150– 250 kilometres (120–240 kWh battery). The firstvehicles are scheduled to be delivered starting in the fall of 2013.	http://nederlandelektris ch.nl/fileadmin/klanten/ ivdm/Nederland Elektris ch/Downloads/Interim Evaluation Hybrid and Electric Driving Demon strations Project 2013. pdf
NL	Houten	Zero-Emission Urban Distribution		The deployment of 100 percent electric lorries active in urban distribution (e.g., moving house, delivering food products, delivering packages). The charging infrastructure (380V, 64A) will be installed at the distributors' sites. The project is currently looking for quality suppliers of suitable charging infrastructure. Nine electric Hytruck freight vehicles have been ordered. The vehicles weigh 12–18 tonnes and have a range of 150–250 kilometres (120–240 kWh battery). The first vehicles are scheduled to be delivered starting in the fall of 2013.	http://nederlandelektris ch.nl/fileadmin/klanten/ ivdm/Nederland Elektris ch/Downloads/Interim Evaluation Hybrid and Electric Driving Demon strations Project 2013. pdf

Funding Country	City/Regi on/Coun try	Project name and abbreviation	Co-funding body	Description	Link
NL	MiddenB eemster	Zero-Emission Urban Distribution		The deployment of 100 percent electric lorries active in urban distribution (e.g., moving house, delivering food products, delivering packages).The charging infrastructure (380V, 64A) will be installed at the distributors' sites. Theproject is currently looking for quality suppliers of suitable charging infrastructure.Nine electric Hytruck freight vehicles have been ordered. The vehicles weigh 12–18tonnes and have a range of 150– 250 kilometres (120–240 kWh battery). The firstvehicles are scheduled to be delivered starting in the fall of 2013.	http://nederlandelektris ch.nl/fileadmin/klanten/ ivdm/Nederland Elektris ch/Downloads/Interim Evaluation Hybrid and Electric Driving Demon strations Project 2013. pdf
NL	Ridderker k	Zero-Emission Urban Distribution		The deployment of 100 percent electric lorries active in urban distribution (e.g., moving house, delivering food products, delivering packages). The charging infrastructure (380V, 64A) will be installed at the distributors' sites. The project is currently looking for quality suppliers of suitable charging infrastructure. Nine electric Hytruck freight vehicles have been ordered. The vehicles weigh 12–18 tonnes and have a range of 150–250 kilometres (120–240 kWh battery). The first vehicles are scheduled to be delivered starting in the fall of 2013.	http://nederlandelektris ch.nl/fileadmin/klanten/ ivdm/Nederland Elektris ch/Downloads/Interim Evaluation Hybrid and Electric Driving Demon strations Project 2013. pdf
NL	Nijmegen area	Electric Urban Freight Transport		ApplicationElectric urban freight distribution in the Arnhem-Nijmegen metropolitan region.Charging infrastructureOne charging station has been installed (32A, AC). Once the vehicles have been delivered, the project will need a total of three charging stations (63A, AC).Electric vehiclesThree full electric Spijkstaal Smith lorries (120 kWh battery) have been ordered.These are expected to go into service starting in the fall of 2013. One Smith Edisonmodel (80 kWh battery) is currently operational as a control vehicle.	http://nederlandelektris ch.nl/fileadmin/klanten/ ivdm/Nederland_Elektris ch/Downloads/Interim_ Evaluation_Hybrid_and Electric_Driving_Demon strations_Project_2013. pdf
DK, SE, NO	Helsingb org (SE)	NEA		The NEA project facilitates a change towards a society with higher shares of electric vehicle carpooling usage. Building on existing models, the project sets up and expands electric car pool fleets in Copenhagen, Helsingborg, Gothenburg and Oslo to create an electric avenue from Copenhagen up through the Swedish west coast to Oslo; the Nordic Electric Avenue.	http://www.nordicenerg y.org/project/nordic- electric-avenue/
DK, SE, NO	Gothenb urg (SE)	NEA		The NEA project facilitates a change towards a society with higher shares of electric vehicle carpooling usage. Building on existing models, the project sets up and expands electric car pool fleets in Copenhagen, Helsingborg, Gothenburg and Oslo to create an electric avenue from Copenhagen up through the Swedish west coast to Oslo; the Nordic Electric Avenue.	http://www.nordicenerg y.org/project/nordic- electric-avenue/

Funding Country	City/Regi on/Coun try	Project name and abbreviation	Co-funding body	Description	Link
DK, SE, NO	Copenha gen (DK)	NEA		The NEA project facilitates a changetowards a society with higher sharesof electric vehicle carpooling usage.Building on existing models, the projectsets up and expands electric carpool fleets in Copenhagen, Helsingborg,Gothenburg and Oslo to createan electric avenue from Copenhagenup through the Swedish west coastto Oslo; the Nordic Electric Avenue.	http://www.nordicenerg y.org/project/nordic- electric-avenue/
DK, SE, NO	Oslo (NO)	NEA		The NEA project facilitates a change towards a society with higher shares of electric vehicle carpooling usage. Building on existing models, the project sets up and expands electric car pool fleets in Copenhagen, Helsingborg, Gothenburg and Oslo to create an electric avenue from Copenhagen up through the Swedish west coast to Oslo; the Nordic Electric Avenue.	http://www.nordicenerg y.org/project/nordic- electric-avenue/
EU	Beja (PT)	EVUE			http://www.sustainable- mobility.org/forum/evue -electric-vehicles-for- sustainable-cities.html
EU	Lisbon (PT)	EVUE			http://www.sustainable- mobility.org/forum/evue -electric-vehicles-for- sustainable-cities.html
EU	Katowice (PL)	EVUE			http://www.sustainable- mobility.org/forum/evue -electric-vehicles-for- sustainable-cities.html
EU	Madrid (ES)	EVUE			http://www.sustainable- mobility.org/forum/evue -electric-vehicles-for- sustainable-cities.html
EU	Frankfurt (DE)	EVUE			http://www.sustainable- mobility.org/forum/evue -electric-vehicles-for- sustainable-cities.html
EU	Oslo (NO)	EVUE			http://www.sustainable- mobility.org/forum/evue -electric-vehicles-for- sustainable-cities.html
EU	Stockhol m (SE)	EVUE			http://www.sustainable- mobility.org/forum/evue -electric-vehicles-for- sustainable-cities.html
EU	Suceava (RO)	EVUE			http://www.sustainable- mobility.org/forum/evue -electric-vehicles-for- sustainable-cities.html
EU	Zografou (GR)	EVUE			http://www.sustainable- mobility.org/forum/evue -electric-vehicles-for- sustainable-cities.html

Funding Country	City/Regi on/Coun try	Project name and abbreviation	Co-funding body	Description	Link
EU	London (UK)	EVUE			http://www.sustainable- mobility.org/forum/evue -electric-vehicles-for- sustainable-cities.html
EU	Berlin (DE)	Ebridge	Intelligent Energy Europe, EU	eBRIDGE is an EU co-funded project that promotes new mobility concepts and services in Europe. It considers electric fleets to be important drivers of change in cities and wider urban areas of the near future. It will encourage car users, mobility service providers, fleet managers and policy makers to change their behaviours and attitudes towards electric vehicles usage.	http://www.ebridge- project.eu/it/
EU	Austrian Municipa lity (AT)	Ebridge	Intelligent Energy Europe, EU	eBRIDGE is an EU co-funded project that promotes new mobility concepts and services in Europe. It considers electric fleets to be important drivers of change in cities and wider urban areas of the near future. It will encourage car users, mobility service providers, fleet managers and policy makers to change their behaviours and attitudes towards electric vehicles usage.	http://www.ebridge- project.eu/it/
EU	Vigo (ES)	Ebridge	Intelligent Energy Europe, EU	eBRIDGE is an EU co-funded project that promotes new mobility concepts and services in Europe. It considers electric fleets to be important drivers of change in cities and wider urban areas of the near future. It will encourage car users, mobility service providers, fleet managers and policy makers to change their behaviours and attitudes towards electric vehicles usage.	<u>http://www.ebridge-</u> project.eu/it/
EU	Valencia- Palma (ES)	Ebridge	Intelligent Energy Europe, EU	eBRIDGE is an EU co-funded project that promotes new mobility concepts and services in Europe. It considers electric fleets to be important drivers of change in cities and wider urban areas of the near future. It will encourage car users, mobility service providers, fleet managers and policy makers to change their behaviours and attitudes towards electric vehicles usage.	http://www.ebridge- project.eu/it/
EU	Milan (IT)	Ebridge	Intelligent Energy Europe, EU	eBRIDGE is an EU co-funded project that promotes new mobility concepts and services in Europe. It considers electric fleets to be important drivers of change in cities and wider urban areas of the near future. It will encourage car users, mobility service providers, fleet managers and policy makers to change their behaviours and attitudes towards electric vehicles usage.	<u>http://www.ebridge-</u> project.eu/it/
EU	Lisbon (PT)	Ebridge	Intelligent Energy Europe, EU	eBRIDGE is an EU co-funded project that promotes new mobility concepts and services in Europe. It considers electric fleets to be important drivers of change in cities and wider urban areas of the near future. It will encourage car users, mobility service providers, fleet managers and policy makers to change their behaviours and attitudes towards electric vehicles usage.	<u>http://www.ebridge-</u> project.eu/it/
EU	Carmarth enshire (UK)	Ebridge	Intelligent Energy Europe, EU	eBRIDGE is an EU co-funded project that promotes new mobility concepts and services in Europe. It considers electric fleets to be important drivers of change in cities and wider urban areas of the near future. It will encourage car users, mobility service providers, fleet managers and policy makers to change their behaviours and attitudes towards electric vehicles usage.	http://www.ebridge- project.eu/it/

Funding Country	City/Regi on/Coun try	Project name and abbreviation	Co-funding body	Description	Link
EU	EU	ELEVTRA	EU	The main objective of ELEVTRA is to develop a comprehensive, international and standardized training programme on the maintenance and repair of Electric Vehicles (EV) and charging stations (CS).	http://elevtra.org/
EU	La Rochelle (FR)	Citymobil2	FP7	European cities face four main mobility problems: congestion, land use , safety and environment. One of the main causes of such problems is the car-ownership rate. The centres of large cities address this issue combining efficient mass transits with car restriction policies but peripheral areas and smaller cities remain dominated by private cars.CityMobil has demonstrated how automating road vehicles can lead to different transport concepts, from partly automated car-share schemes through CyberCars and PRT, to BRT which can make urban mobility more sustainable.However CityMobil has also highlighted three main barriers to the deployment of automated road vehicles: the implementation framework, the legal framework and the unknown wider economic effect.The CityMobil2 goal is to address these barriers and finally to remove them.	http://www.citymobil2.e u/en/
EU	Saint- Sulpice West Lusanne (CH)	Citymobil2	FP7	European cities face four main mobility problems: congestion, land use , safety and environment. One of the main causes of such problems is the car-ownership rate. The centres of large cities address this issue combining efficient mass transits with car restriction policies but peripheral areas and smaller cities remain dominated by private cars.CityMobil has demonstrated how automating road vehicles can lead to different transport concepts, from partly automated car-share schemes through CyberCars and PRT, to BRT which can make urban mobility more sustainable.However CityMobil has also highlighted three main barriers to the deployment of automated road vehicles: the implementation framework, the legal framework and the unknown wider economic effect.The CityMobil2 goal is to address these barriers and finally to remove them.	http://www.citymobil2.e u/en/

Funding Country	City/Regi on/Coun try	Project name and abbreviation	Co-funding body	Description	Link
EU	Milan (IT)	Citymobil2	FP7	European cities face four main mobility problems: congestion, land use , safety and environment. One of the main causes of such problems is the car-ownership rate. The centres of large cities address this issue combining efficient mass transits with car restriction policies but peripheral areas and smaller cities remain dominated by private cars.CityMobil has demonstrated how automating road vehicles can lead to different transport concepts, from partly automated car-share schemes through CyberCars and PRT, to BRT which can make urban mobility more sustainable.However CityMobil has also highlighted three main barriers to the deployment of automated road vehicles: the implementation framework, the legal framework and the unknown wider economic effect.The CityMobil2 goal is to address these barriers and finally to remove them.	http://www.citymobil2.e u/en/
EU	Oristano (IT)	Citymobil2	FP7	European cities face four main mobility problems: congestion, land use , safety and environment. One of the main causes of such problems is the car-ownership rate. The centres of large cities address this issue combining efficient mass transits with car restriction policies but peripheral areas and smaller cities remain dominated by private cars.CityMobil has demonstrated how automating road vehicles can lead to different transport concepts, from partly automated car-share schemes through CyberCars and PRT, to BRT which can make urban mobility more sustainable.However CityMobil has also highlighted three main barriers to the deployment of automated road vehicles: the implementation framework, the legal framework and the unknown wider economic effect.The CityMobil2 goal is to address these barriers and finally to remove them.	http://www.citymobil2.e u/en/
EU	Vantaa (FI)	Citymobil2	FP7	European cities face four main mobility problems: congestion, land use , safety and environment. One of the main causes of such problems is the car-ownership rate. The centres of large cities address this issue combining efficient mass transits with car restriction policies but peripheral areas and smaller cities remain dominated by private cars.CityMobil has demonstrated how automating road vehicles can lead to different transport concepts, from partly automated car-share schemes through CyberCars and PRT, to BRT which can make urban mobility more sustainable.However CityMobil has also highlighted three main barriers to the deployment of automated road vehicles: the implementation framework, the legal framework and the unknown wider economic effect.The CityMobil2 goal is to address these barriers and finally to remove them.	http://www.citymobil2.e u/en/

Funding Country	City/Regi on/Coun try	Project name and abbreviation	Co-funding body	Description	Link
EU	Leon	Citymobil2	FP7	European cities face four main mobility problems: congestion, land use , safety and environment. One of the main causes of such problems is the car-ownership rate. The centres of large cities address this issue combining efficient mass transits with car restriction policies but peripheral areas and smaller cities remain dominated by private cars.CityMobil has demonstrated how automating road vehicles can lead to different transport concepts, from partly automated car-share schemes through CyberCars and PRT, to BRT which can make urban mobility more sustainable.However CityMobil has also highlighted three main barriers to the deployment of automated road vehicles: the implementation framework, the legal framework and the unknown wider economic effect.The CityMobil2 goal is to address these barriers and finally to remove them.	http://www.citymobil2.e u/en/
EU	Geneve (CH)	Citymobil2	FP7	European cities face four main mobility problems: congestion, land use , safety and environment. One of the main causes of such problems is the car-ownership rate. The centres of large cities address this issue combining efficient mass transits with car restriction policies but peripheral areas and smaller cities remain dominated by private cars.CityMobil has demonstrated how automating road vehicles can lead to different transport concepts, from partly automated car-share schemes through CyberCars and PRT, to BRT which can make urban mobility more sustainable.However CityMobil has also highlighted three main barriers to the deployment of automated road vehicles: the implementation framework, the legal framework and the unknown wider economic effect.The CityMobil2 goal is to address these barriers and finally to remove them.	http://www.citymobil2.e u/en/
EU, FR, DE, AT	AT	SCELECTRA	ERA NET (EU) + Countries	SCelecTRA is about depicting the future of Electromobility in Europe. The project is aiming at gathering different approaches: economic, environmental, political and technical to figure out the best ways to promote the arrival of electrified vehicles such as electric and hybrid vehicles.	http://projet.ifpen.fr/Pr ojet/jcms/xnt 79165/fr/ scelectra
EU, FR, DE, AT	DE	SCELECTRA	ERA NET (EU) + Countries	SCelecTRA is about depicting the future of Electromobility in Europe. The project is aiming at gathering different approaches: economic, environmental, political and technical to figure out the best ways to promote the arrival of electrified vehicles such as electric and hybrid vehicles.	http://projet.ifpen.fr/Pr ojet/jcms/xnt 79165/fr/ scelectra

Funding Country	City/Regi on/Coun try	Project name and abbreviation	Co-funding body	Description	Link
EU, FR, DE, AT	FR	SCELECTRA	ERA NET (EU) + Countries	SCelecTRA is about depicting the future of Electromobilityin Europe. The project is aiming at gathering different approaches:economic, environmental, political and technical tofigure out the best ways to promote the arrival of electrifiedvehicles such as electric and hybrid vehicles.	http://projet.ifpen.fr/Pr ojet/jcms/xnt 79165/fr/ scelectra
EU	EU	ΕΜΑΡ	ERA NET (EU) + Countries	The main objective of the eMAP (electromobility – scenario based Market potential, Assessment and Policy options) project (2012-2015) is to analyse feasible deployment paths of electric vehicles for the time horizon until 2025-2030. This will be done using a scenario based market model which specifies consumer demand and market supply of electromobility.	http://www.project- emap.eu/
EU, DE, AT, DK	DE	SELECT	ERA NET (EU) + Countries	The project "Suitable electromobility for commercial transport" (SELECT), supported by the European Union as well as national funding authorities in Austria, Denmark and Germany, investigates how electric vehicles could contribute to an environmentally sustainable alternative to current patterns of urban commercial transport.	http://www.select- project.eu/select
EU, DE, AT, DK	AT	SELECT	ERA NET (EU) + Countries	The project "Suitable electromobility for commercial transport" (SELECT), supported by the European Union as well as national funding authorities in Austria, Denmark and Germany, investigates how electric vehicles could contribute to an environmentally sustainable alternative to current patterns of urban commercial transport.	http://www.select- project.eu/select
EU, DE, AT, DK	DK	SELECT	ERA NET (EU) + Countries	The project "Suitable electromobility for commercial transport" (SELECT), supported by the European Union as well as national funding authorities in Austria, Denmark and Germany, investigates how electric vehicles could contribute to an environmentally sustainable alternative to current patterns of urban commercial transport.	http://www.select- project.eu/select
EU, NO, DK, AT	NO	COMPETT	ERA NET (EU) + Countries	COMPETT explores functionalities and potential barriers for the wide range of electrified vehicles that are in use today. The project seeks to develop an economic model showing the costs and benefits of electrified vehicles. E-vehicle noise will also be analyzed. Austria, Denmark and Norway participate in the project. Read more on compett.com - See more at: http://setis.ec.europa.eu/energy- research/project/compett-competitive- electric-town- transport#sthash.12nHKJ4d.dbuf	http://www.compett.or g/
EU, NO, DK, AT	DK	COMPETT	ERA NET (EU) + Countries	COMPETT explores functionalities and potential barriers for the wide range of electrified vehicles that are in use today. The project seeks to develop an economic model showing the costs and benefits of electrified vehicles. E-vehicle noise will also be analyzed. Austria, Denmark and Norway participate in the project. Read more on compett.com - See more at: http://setis.ec.europa.eu/energy- research/project/compett-competitive- electric-town- transport#sthash.12nHKI4d.dnuf	http://www.compett.or g/

Funding Country	City/Regi on/Coun try	Project name and abbreviation	Co-funding body	Description	Link
EU, NO, DK, AT	AT	COMPETT	ERA NET (EU) + Countries	COMPETT explores functionalities and potential barriers for the wide range of electrified vehicles that are in use today. The project seeks to develop an economic model showing the costs and benefits of electrified vehicles. E-vehicle noise will also be analyzed. Austria, Denmark and Norway participate in the project. Read more on compett.com - See more at: http://setis.ec.europa.eu/energy- research/project/compett-competitive- electric-town- transport#sthash.12nHKJ4d.dpuf	http://www.compett.or g/
EU, SE, DE, NL	Arnhem, NL,	E-FACTS	ERA NET (EU) + Countries	E-FACTS aims at speeding up the uptake of EVs through a number of carefully chosen demonstrations of EVs for city distribution and passenger transport, together with public charging possibilities which also includes the issues of keeping even pace with a growing number of EVs, avoiding vandalism and still keeping accessibility for all citizens, making sure the electricity is green whoever delivers etc. The project will also promote other stakeholder to set up charging facilities at parking lots, garages, shopping malls, park'n'ride, airports etc according to the recommendations developed by the project.	http://www.pt- em.de/de/1617.php
EU, SE, DE, NL	Frankfurt , DE	E-FACTS	ERA NET (EU) + Countries	E-FACTS aims at speeding up the uptake of EVs througha number of carefully chosen demonstrations of EVs for citydistribution and passenger transport, together with publiccharging possibilities which also includes the issues of keepingeven pace with a growing number of EVs, avoidingvandalism and still keeping accessibility for all citizens, makingsure the electricity is green whoever delivers etc. Theproject will also promote other stakeholder to set up chargingfacilities at parking lots, garages, shopping malls, park'n'ride,airports etc according to the recommendations developed bythe project.	http://www.pt- em.de/de/1617.php

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EU, SE, DE, NL	Stockhol m, SE	E-FACTS	ERA NET (EU) + Countries	E-FACTS aims at speeding up the uptake of EVs through a number of carefully chosen demonstrations of EVs for city distribution and passenger transport, together with public charging possibilities which also includes the issues of keeping even pace with a growing number of EVs, avoiding vandalism and still keeping accessibility for all citizens, making sure the electricity is green whoever delivers etc. The project will also promote other stakeholder to set up charging facilities at parking lots, garages, shopping malls, park'n'ride, airports etc according to the recommendations developed by	http://www.pt- em.de/de/1617.php
BG	Sofia	BAEPS		Demonstrate business viability of EVs Scope: 100 participants, 300 vehicles, 150 charging points Target group: Utility fleets	http://baeps.org/
BG	Plovdiv	BAEPS		Demonstrate business viability of EVs Scope: 100 participants, 300 vehicles, 150 charging points Target group: Utility fleets	http://baeps.org/
BG	Varna	BAEPS		Demonstrate business viability of EVs Scope: 100 participants, 300 vehicles, 150 charging points Target group: Utility fleets	http://baeps.org/
BG	Bourgas	BAEPS		Demonstrate business viability of EVs Scope: 100 participants, 300 vehicles, 150 charging points Target group: Utility fleets	http://baeps.org/
BG	Stara Zagora	BAEPS		Demonstrate business viability of EVs Scope: 100 participants, 300 vehicles, 150 charging points Target group: Utility fleets	http://baeps.org/
BG	Rousse	BAEPS		Demonstrate business viability of EVs Scope: 100 participants, 300 vehicles, 150 charging points Target group: Utility fleets	http://baeps.org/
BG	Pleven	BAEPS		Demonstrate business viability of EVs Scope: 100 participants, 300 vehicles, 150 charging points Target group: Utility fleets	http://baeps.org/

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EU	MT	Life+ DemoEV	EU - LIFE	DemoEV – Demonstrating the feasibility of electric vehicles towards climate change mitigation – involves the following phases:	http://electricvehiclesm alta.eu/
				Purchasing of electric vehicles Installation of charging points Market research (design of survey) Contracting of all service providers Launching & selecting Call for Volunteers	
				Monitoring Data Collection Demonstration Pilot Project (testing of the vehicles) Communication and Dissemination Actions	
				Collation of data post-demonstration phase Analysis of data Identify recommendations on electromobility in the afterlife of DemoEV	
EU	Catania IT	PortPVEV	PO-Italia Malta		http://www.portpvev.eu
EU	Gela IT	PortPVEV	PO-Italia Malta		http://www.portpvev.eu
EU	Malta IT	PortPVEV	PO-Italia Malta		http://www.portpvev.eu
EU	Eberswal de (DE)	TROLLEY	EU - INTERREG IVB CENTRAL EUROPE Programme	TROLLEY contributes to an improved accessibility of, and within, Central European cities, focusing on urban transport. By taking an integrated approach the project has one main aim: the promotion of trolleybuses as the cleanest and most economical transport mode for sustainable cities and regions in Central Europe.	www.trolley-project.eu
EU	Szeged in HU	TROLLEY	EU - INTERREG IVB CENTRAL EUROPE Programme	TROLLEY contributes to an improved accessibility of, and within, Central European cities, focusing on urban transport. By taking an integrated approach the project has one main aim: the promotion of trolleybuses as the cleanest and most economical transport mode for sustainable cities and regions in Central Europe.	www.trolley-project.eu
EU	Brno, (CZ)	TROLLEY	EU - INTERREG IVB CENTRAL EUROPE Programme	TROLLEY contributes to an improved accessibility of, and within, Central European cities, focusing on urban transport. By taking an integrated approach the project has one main aim: the promotion of trolleybuses as the cleanest and most economical transport mode for sustainable cities and regions in Central Europe.	www.trolley-project.eu
EU	Gdynia, (PL)	TROLLEY	EU - INTERREG IVB CENTRAL EUROPE Programme	TROLLEY contributes to an improved accessibility of, and within, Central European cities, focusing on urban transport. By taking an integrated approach the project has one main aim: the promotion of trolleybuses as the cleanest and most economical transport mode for sustainable cities and regions in Central Europe.	www.trolley-project.eu

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EU	Parma, (IT)	TROLLEY	EU - INTERREG IVB CENTRAL EUROPE Programme	TROLLEY contributes to an improved accessibility of, and within, Central European cities, focusing on urban transport. By taking an integrated approach the project has one main aim: the promotion of trolleybuses as the cleanest and most economical transport mode for sustainable cities and regions in Central Europe.	www.trolley-project.eu
EU, FR, DE, DK	FR	EV-STEP	ERA NET (EU) + Countries	EV-STEP's overall goal is the long term strategic analysis of the energy, economic and environmental dimensions of the different kinds of electric vehicles i.e. pure and plug in hybrid electric vehicles. While the years up to 2030 define our main period of interest, our analyses will be extended to 2050 to ensure adequacy with EU's long term GHG mitigation objectives. EV-STEP is a two year project funded under the ERANET Electromobility + program and brought to you by a consortium of four European research institutes.	http://www.ev- step.com/index.html
EU, FR, DE, DK	DE	EV-STEP	ERA NET (EU) + Countries	EV-STEP's overall goal is the long term strategic analysis of the energy, economic and environmental dimensions of the different kinds of electric vehicles i.e. pure and plug in hybrid electric vehicles. While the years up to 2030 define our main period of interest, our analyses will be extended to 2050 to ensure adequacy with EU's long term GHG mitigation objectives. EV-STEP is a two year project funded under the ERANET Electromobility + program and brought to you by a consortium of four European research institutes.	http://www.ev- step.com/index.html
EU, FR, DE, DK	DK	EV-STEP	ERA NET (EU) + Countries	EV-STEP's overall goal is the long term strategic analysis of the energy, economic and environmental dimensions of the different kinds of electric vehicles i.e. pure and plug in hybrid electric vehicles. While the years up to 2030 define our main period of interest, our analyses will be extended to 2050 to ensure adequacy with EU's long term GHG mitigation objectives. EV-STEP is a two year project funded under the ERANET Electromobility + program and brought to you by a consortium of four European research institutes.	http://www.ev- step.com/index.html
	Vienna	W-ETAXi	E-Mobilität für alle: Urbane Elektromobilität, Phase 1	In the research project "W-eTaxi" funded by climate and energy funds the general conditions under which a cross section of Viennese taxi drivers will operate using electric vehicles will be investigated. In the process a selection of important questions concerning legal, organisational, technical and economic areas will be addressed.	http://www.ea.tuwien.a c.at/projects/w_etaxi/E N/
AT	AT	QS InfraPlan e- mobil	This project will be funded by the BMWFW in the context Förderungssch werpunkts "Forschungskompeten zen für die Wirtschaft"		http://www.ea.tuwien.a c.at/projects/qs_e_mob /EN/
AT	AT	e-pendler			http://www.ea.tuwien.a c.at/projects/e_pendler/ EN/

Funding Country	City/Regi on/Coun try	Project name and abbreviation	Co-funding body	Description	Link
AT	AT	ADSM		Goal of the project aDSM is the development of hierarchical, scalable systems with distributed intelligence. Household load as well as the demand of electrical vehicles will be used flexible to level the local renewable generation. Load shifting and charge controlling will be used actively and anticipatory based on an optimized power forecast. If a local balance is not possible, the upper system levels (up to the transmission power grid) or energy storage will intervene coordinated. The aim is to reduce the requirement of storage as well as the network load by the use of aDSM. On the basis of electric vehicles and a PV system, is a practical demonstration of the aDSM system implementation for a single network node performe	http://www.ea.tuwien.a c.at/projects/adsm/EN/
AT	AT	ZENEM	Klima- und Energiefonds in the programme "NEUE ENERGIEN 2020"	Through the project ZENEM feasibility of integration of prospective electric-loads like electromobiliy in existed grid will be assessed. High penetration rate of electric vehicles (EV) causes higher power density in the distribution grid especially in the case of E-Taxi which features high concentration in taxi stands. Impact of E-taxies on the distribution network will be comprehensively investigated.	http://www.ea.tuwien.a c.at/projects/zenem/EN/
EU, AT, DE	AT	SPEED FOR SME's	ERA NET (EU) + Countries	The projects target of "Speed for SME's" is to create a tool for the suppliers of the automotive industry in the field of e-mobility to develop and test components in a shorter and more cost effective way that it was done before. The main focus is on the small and medium-sized companies in the automotive supply industry.	http://www.rally-e.at/
EU, AT, DE	DE	SPEED FOR SME's	ERA NET (EU) + Countries	The projects target of "Speed for SME's" is to create a tool for the suppliers of the automotive industry in the field of e-mobility to develop and test components in a shorter and more cost effective way that it was done before. The main focus is on the small and medium-sized companies in the automotive supply industry.	http://www.rally-e.at/
DE	Bremen/ Oldenbur g	Begleitforschung Infrastruktur Modellregionen Elektromobilität BMVBS	Federal Ministry of transport, Building and Urban development	The goal of this project proposal is to combine research projects in the infrastructure sector for electric mobility . By supporting research that builds on the already given results of platform infrastructure NOW GmbH , the findings will be collected , processed and evaluated on the subject of charging infrastructure	http://www.modellregio n-bremen- oldenburg.de/de/projekt e-und- aktivitaeten/aktuelle- projekte/begleitforschun g-infrastruk

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DE	Bremen/ Oldenbur g	Dynamische induktive Energieübertragu ng	Federal Ministry of transport, Building and Urban development	The vision is very simple: electric vehicles get their energy not from the hard drive to onboard batteries, but can virtually " in motion" to be refueled , and that too without contact. That larger electrical services at very high speeds can be transmitted inductively virtually lossless, the contactless power transmission system of the Transrapid has now shown impressive worldwide. It is this concept of dynamic inductive energy transfer is pursuing the project. Subject of current project work is to define the best architecture of the system components ( primary cables , converters, positioning systems ) , segment length and cable geometry.	http://www.modellregio n-bremen- oldenburg.de/de/projekt e-und- aktivitaeten/aktuelle- projekte/dynamische- induktive-energi
DE	Bremen/ Oldenbur g	UI EMO	Federal Ministry of transport, Building and Urban development	Under the auspices of the Bremen Nehlsen AG will test the "Business Initiative for Electric Mobility" in the next three years, the widespread use of electric vehicles in practice . In November 2011, over 80 companies have joined forces Electromobility corporate initiative . Together, they have expressed an interest in approximately 160 vehicles and nearly 200 charging points in the model region electric mobility to take Bremen / Oldenburg in operation. Nehlsen AG will acquire the vehicles and charging infrastructure , leaving the participating companies to use .	https://www.google.it/s earch?q=translatro&oq= translatro&aqs=chrome. .69i57j0I5.2311j0j7&sou rceid=chrome&es_sm=9 3&ie=UTF-8
DE	Bremen/ Oldenbur g	NeMoLand	Federal Ministry of transport, Building and Urban development	Modern society and economic prosperity are characterized by mobility and traffic.For the rural areas in and around Bremen/Oldenburg both have always been of utmostimportance, even more so since mobility plays a crucial role in economic growthand employment. The aim of the project is furthering electric mobility in the regionBremen/Oldenburg, focusing on three main issues:1. Applied Electric Mobility, 2. Technological Concepts,3. Mobility Effects	http://www.modellregio n-bremen- oldenburg.de/de/projekt e-und- aktivitaeten/aktuelle- projekte/nemoland.html
DE	Bremen/ Oldenbur g	DaBrEm	Federal Ministry of transport, Building and Urban development	The DaBrEM project investigated in collaboration with Bremen's Chinese partner city of Dalian electric mobility in relation to data logging and analysis using novel concept vehicles. The aim is not only the actual use of electric vehicles to evaluate today in everyday life, but also to have implications for the future.	http://www.modellregio n-bremen- oldenburg.de/de/projekt e-und- aktivitaeten/aktuelle- projekte/dabrem.html
DE	Friedrich shafen	BodenseEmobil	Federal Ministry of transport, Building and Urban development	The goal of the project is to promote the electric vehicle as a valuable component of everyday life for the people of the Bodensee (Lake Constance) region and that it complements the public transport network. The vehicles run with power from renewable sources and enable environmentally conscious mobility free of any hidden impact on the environment.	http://www.now- gmbh.de/en/mobility/m obility-of- tomorrow/electromobili ty-model- regions/friedrichshafen. html

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DE	Thuringia	EMOTIF	Federal Ministry of transport, Building and Urban development	The EMOTIF project – "Elektromobiles Thüringen in der Fläche" (Electromobile Thuringia in the Countryside) is a research project to examine the performance of electric vehicles in combination with public transport services. Aim of the project is to develop a recharging infrastructure for electric vehicles at crossing points and junctions with public transport to thereby be in a position to provide an effective, sustainable mobility solution in rural regions.	http://www.emotif.de/
DE	Rhine- Main	TeBALE	426	Cross-project revision of general, technical issues, in particular the relevant for the "Alliance electric mobility" project themes.	http://www.offenbach.d e/stepone/data/pdf/89/ 20/00/soh_projektblaett er- techbegleitforschung_sc reen.pdf
DE	Rhine- Main	Sozialwissenschaf tliche und ökologische Begleitforschung »Allianz Elektromobilität«	Federal Ministry of transport, Building and Urban development	Due to the variety of individual projects in the Model region is a great research potential. All projects in the "Alliance Electric Mobility" through quantitative surveys, in-depth interviews, Workshops and mobility analyzes scientifically accompanying. Prior knowledge of the activities on e-mobility Part of the stimulus package II targeted for used new research questions and developed.	http://www.offenbach.d e/stepone/data/pdf/8a/ 20/00/soh projektblaett er- sozbegleitforschung scr een.pdf
DE	Rhine- Main	E-Fleet	Federal Ministry of transport, Building and Urban development	Investigation of the suitability of electric vehicles in various service areas and aircraft handling in terms of airport-specific requirements Study of optimization opportunities in the Powered by need-based, controlled loading Introduction of an airport-specific standards for charging Systems Comparison of different charging systems Analysis and improvement of user acceptance Introducing the findings in the "Alliance Electric Mobility"	http://www.offenbach.d e/stepone/data/pdf/8e/ 20/00/soh projektblaett er-fraport_screen.pdf
DE	Rhine- Main	eMOMA	Federal Ministry of transport, Building and Urban development	Developing a sustainable, cost-basedand multimodal mobility management conceptfor the conversion of pool vehicles and personalCompany car for private purposes on electric mobility.Development of a Mobility Management Systemsto optimal and demand- oriented scheduling ofE-vehicles in a mixed vehicle pool.	http://www.offenbach.d e/stepone/data/pdf/8d/ 20/00/soh projektblaett er-emoma screen.pdf
DE	Rhine- Main	FREE-Freizeit	Federal Ministry of transport, Building and Urban development	Development of intermodal electric mobility services for visitors to leisure destinations and major events Northern Hesse. Visitors to the offer in advance of your stay an innovative Booking system as well as the local hotels can book and be encouraged to without Arriving by car.	http://www.offenbach.d e/stepone/data/pdf/8f/ 20/00/soh projektblaett er-free_screen.pdf

Funding Country	City/Regi on/Coun try	Project name and abbreviation	Co-funding body	Description	Link
DE	Rhine- Main	Leben im Westen	Federal Ministry of transport, Building and Urban development	Development of transferable planning instruments to sustainable integration of electric mobility in urban planning. Construction of infrastructure, particularly supervised Rental stations at the same time the development is subject of a new business model: Mobility Consulting and vehicle rental in existing Commercial enterprises and entrepreneurs. Building a broad-mixed fleet of electric vehicles. To develop a suitable model for the operator Vehicle fleet: Cooperative creation, distribution in Sharing system. Objective: Apartment Near mobility chains as a product, Involvement in a regional booking system "Alliance electric mobility".	http://www.offenbach.d e/stepone/data/pdf/90/ 20/00/soh projektblaett er- lebenimwesten screen. pdf
DE	Rhine- Main	eMiO	Federal Ministry of transport, Building and Urban development	There are up to 40 electric vehicles (cars and vans)be brought to Offenbach's streets.Providing a "Use and Share" system:Weekdays use by Offenbach firm,optional electric vehicles on the weekendand can be used on holidays from employees.Developing a business model for the multipleUse.Achieve higher utilization by themultiple usage model.Offer of the necessary infrastructure andServices if necessary.Integration of the project in the "Alliance of electric mobility."	http://www.offenbach.d e/stepone/data/pdf/8b/ 20/00/soh projektblaett er-emio screen.pdf
DE	Rhine- Main	AMPERE	Federal Ministry of transport, Building and Urban development	Electric mobility is on the rise in urban Mobility concepts. As part of a joint project Adam Opel AG, Vattenfall Europe Innovation GmbH and of the Department of motor vehicles of Technology University of Berlin, 300 electric vehicles examined with extended range in everyday use. The Opel Ampera has used an electric range of 40-80 km and can be used for longer distances the internal combustion engine on board as a generator use. This provides the planned biggest European Fleet test of electric vehicles valuable Information on the use of electrified vehicles and the use of the utility infrastructure under real Conditions.	http://www.offenbach.d e/stepone/data/pdf/12/ 21/00/soh projektblaett er ampere screen.pdf
DE	Rhine- Ruhr	eMERGE	Federal Ministry of transport, Building and Urban development	Goal of EMERGE is to examine technical aspects of electric cars and smart charging systems to improve the current network utilization. Additionally come in terms of customer acceptance of different pricing systems used allow conclusions on user behavior. With the help of traffic models of electric mobility requirements shall be determined using the charging infrastructure and assess the need for publicly available charging infrastructure and related regulatory options.	http://www.emerge- projekt.de/

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DE	Rhine- Ruhr	RUHRAUTOe	Federal Ministry of transport, Building and Urban development	45 electric vehicles in residential areas and in the form City area in eight Ruhr Area cities a car-sharing network of more than 27 locations. The individual vehicle stations are directly connected to the public transport stops and cross-linked with public transport (train, bus and tram). The main objective of this residential location-based approach is to offer residents the respective optimum mobility services consisting of public transportation and electric mobility through a personal approach.	http://www.ruhrautoe.d
DE	DE	PraxPerform E	Federal Ministry of transport, Building and Urban development	The accompanying research project PraxPerform E deals with the assessment of Pra-xistauglichkeit and environmental performance of electric and hybrid vehicles in the area of passenger cars and light commercial vehicles. Provide a basis for assessing long-term measurements of the vehicles used in the dif-ferent model regions and projects. Main goal is important vendor- independent operating knowledge of various hybrid and electric vehicle models for a wide range of applications to gain and to derive the environmental contribution of electric mobility in the areas of individual and commercial traffic.	http://www.now- gmbh.de/en/project- finder.html?indexedsear ch=1&tx awprojektakko rdeon_pi1%5Ba%5D=2& tx_awprojektakkordeon _pi1%5Bb%5D=1&tx_aw projektakkordeon_pi1% 5Bc%5D=3&tx_awprojek takkordeon_pi1%5Bd%55 D=0&tx_awprojektakkor deon_pi1%5Bmode%5D =indexedsearch&cHash= c2f4789d64237d0498ad 72c0c42999ef#/modellr egionen- elektromobilitaet/ueber regionale- projekte/praxperform-e
DE	Braunsch weig	PRIMOVE Braunschweig	Federal Ministry of transport, Building and Urban development		http://www.now- gmbh.de/en/project- finder.html?indexedsear ch=1&tx awprojektakko rdeon pi1%5Ba%5D=2& tx awprojektakkordeon pi1%5Bb%5D=1&tx aw projektakkordeon pi1% 5Bc%5D=3&tx awprojek takkordeon pi1%5Bd%5 D=0&tx awprojektakkor deon pi1%5Bmode%5D =indexedsearch&cHash= c2f4789d64237d0498ad 72c0c42999ef#/modellr egionen- elektromobilitaet/ueber regionale- projekte/primove- braunschweig
DE	Mannhei m	PRIMOVE Mannheim	Federal Ministry of transport, Building and Urban development		http://primove.bombard ier.com/references/brau nschweig/
DE	Hamburg	eQuartier Hamburg	Federal Ministry of transport, Building and Urban development	The project includes the development and testing of mobility services with electric vehicles both in the development of new residential districts and in stock. This is intended to fundamental insights for future market development-development in the sense of an integrative approach to the introduction of electric mobility are obtained from private households.	http://www.now- gmbh.de/en/project- finder.html#/modellregi onen- elektromobilitaet/model Iregionen- elektromobilitaet/mr- hamburg/hamburg- equartier-hamburg

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DE	Hamburg	Modellregion Hamburg: Hamburg – Wirtschaft am Strom	Federal Ministry of transport, Building and Urban development	The project "Hamburg - the current economy" focuses on the testing of up to 740 electric vehicles in businesses and communities and builds on the experience of the first phase model region. In addition to site-specific industries such as port management, logistics, aviation is a focus on the participation of small and medium-sized companies and the fleets of the Hamburger administration. The aim is to identify operational capabilities for electric vehicles and to demonstrate the suitability for daily use in the commercial sector.	http://www.now- gmbh.de/en/project- finder.html#/modellregi onen- elektromobilitaet/model lregionen- elektromobilitaet/mr- hamburg/hamburg- equartier-hamburg
DE	Rhine- Ruhr	ColognE-mobil II	Federal Ministry of transport, Building and Urban development	Based on the experience of "colognE-mobil phase I" is the overall system electric mobility conceptually, z. B. by integrating the topics Taxibetrieb and car sharing, and content are developed and implemented. In addition to a numerical extension of the existing electric vehicle fleet by a further 49 vehicles will be a technical advancement in terms of plug-in hybrid vehicles.Thus, in this test fleet of 66 electric vehicles are used (incl. 17 phase I) to the one to deepen the existing holistic approach and continue to make to the other electric mobility in an urban area in all its forms experienced.	http://www.now- gmbh.de/en/project- finder.html#/modellregi onen- elektromobilitaet/model lregionen- elektromobilitaet/mr- rhein-ruhr/rhein-ruhr- cologne-mobil-ii
DE	Rhine- Ruhr	E-Carflex Business	Federal Ministry of transport, Building and Urban development	The project partners state capital Dusseldorf, Drive Carsharing and Stadtwerke Dusseldorf bring 31 newly acquired electric car into a virtual common vehicle pool. The vehicles will be used in a first phase for business applications in the enterprise, so that a basic load is ensured in this way. In addition, the vehicles are hired in a second phase after business hours and on weekends its own employees for private use.	http://www.now- gmbh.de/en/project- finder.html#/modellregi onen- elektromobilitaet/model Iregionen- elektromobilitaet/mr- rhein-ruhr/rhein-ruhr-e- carflex-business
DE	Rhine- Ruhr	e-MoVe	Federal Ministry of transport, Building and Urban development	The aim of the project is to prepare a comprehensive spread of electric mobility through instrumental, conceptual, strategic and functional integration of electric mobility in urban mobility.	http://www.now- gmbh.de/en/project- finder.html#/modellregi onen- elektromobilitaet/model lregionen- elektromobilitaet/mr- rhein-ruhr/rhein-ruhr- emove-aachen
DE	Rhine- Ruhr	Langstrecken- Elektromobilität	Federal Ministry of transport, Building and Urban development		http://www.now- gmbh.de/en/project- finder.html#/modellregi onen- elektromobilitaet/model lregionen- elektromobilitaet/mr- rhein-ruhr/rhein-ruhr- langstrecken- elektromobilitaet

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DE	Stuttgart	elektromobilisiert. de – Entwicklung eines Services zur Elektrifizierung von Fuhrparkflotten	Federal Ministry of transport, Building and Urban development	With the project "Elektromobilisiert.de" fleet operators to support them in the integration of electric vehicles in their fleets. For this purpose, a software-based fleet analysis based on logbooks is carried out taking into account individual economic and environmental conditions in seven industrial partners.	http://www.now- gmbh.de/en/project- finder.html#/modellregi onen- elektromobilitaet/model lregionen- elektromobilitaet/mr- stuttgart/stuttgart- elektromobilisiert.de
DE	Stuttgart	ELENA II	Federal Ministry of transport, Building and Urban development	As part of the "EleNa" project, a consortium of medium-sized companies and research institutes electric drive conversion kits designed for vans with conventional internal combustion engine, as frequently by small and medium-sized enterprises (SMEs) are used. These conversion kits allow independent of the medium to long-term strategies and plans of the original equipment fast, gradual transition to the new drive technology with little investment hurdle.	http://www.now- gmbh.de/en/project- finder.html#/modellregi onen- elektromobilitaet/model lregionen- elektromobilitaet/mr- stuttgart/stuttgart- elena-ii-
DE	Stauferla nd	EMIS	Federal Ministry of transport, Building and Urban development	The two central cities Göppingen and Schwäbisch Gmünd are as "Staufer cities" in the catchment area of the Stuttgart Region. Both have together with six other partners as well as the Town Planning Institute, University of Stuttgart, the project "EMIS - integrated into urban development and climate change - electric mobility in Staufer country" was launched. The aim of the project is to test the contribution of electric vehicles to urban development and climate change goals.	http://www.now- gmbh.de/en/project- finder.html#/modellregi onen- elektromobilitaet/model lregionen- elektromobilitaet/mr- stuttgart/stuttgart-emis- elektromobilitaet-im- stauferland
DE	Sachsen- Anhalt	Grüne Mobilitätskette	Federal Ministry of transport, Building and Urban development	Green door-to-door: The Green Mobility chain is forged. Eight innovative transport and commercial companies and research institutions have under the direction of the transport service Sachsen-Anhalt GmbH (NASA) together-closed in Central Germany, the vision of a climate-friendly way chain of door-to-door in the city, the region and the region with the involvement of electric vehicles, energy, information technology, as well as a Intermo-modal network with public transport and (carbonyl) sharing deals - Green mobility chain - to realize.	http://www.now- gmbh.de/en/project- finder.html#/modellregi onen- elektromobilitaet/model Iregionen- elektromobilitaet/weiter e-projekte-in-regionen/
СН	СН	EVite		In the EVite project, 14 strong partners are aiming to set up a nationwide fast-charging network for e-vehicles in Switzerland. With the support of the Federal Roads Office (Astra), 200 strategically important locations have been identified for fast-charging stations; the equipment is currently being installed. The three cornerstones of EVite: It should be possible to recharge any car with fast-charging equipment at an EVite station. An EVite station should be accessible around the clock. The billing system should be non-proprietary and uniform.	http://www.swiss- emobility.ch/it/portrait/i ndex.php

Funding Country	City/Regi on/Coun try	Project name and abbreviation	Co-funding body	Description	Link
СН	Ticino	RiParTi		RiparTI 2.0 is an applied research project, carried out in 2013, which handles the management and development of the infrastructure for recharging electric vehicles.	http://riparti.ch/evoluzi one- infrastruttura/introduzio ne/
EU	Barcelon a	ZEEUS	FP7	ZeEUS project focus on the today's challenge in the electrification of bus system, the extension of the fully-electric solution to a wider part of the urban network. This goes through the development of electric vehicles of large capacity, and the creation of an infrastructure capable of providing the required charging energy, operated according to non-disruptive and grid-balancing principles.	http://cordis.europa.eu/ project/rcn/186997 en. html
EU	Bonn	ZEEUS	FP7	ZeEUS project focus on the today's challenge in the electrification of bus system, the extension of the fully-electric solution to a wider part of the urban network. This goes through the development of electric vehicles of large capacity, and the creation of an infrastructure capable of providing the required charging energy, operated according to non-disruptive and grid-balancing principles.	http://cordis.europa.eu/ project/rcn/186997_en. html
EU	Muenste r	ZEEUS	FP7	ZeEUS project focus on the today's challenge in the electrification of bus system, the extension of the fully-electric solution to a wider part of the urban network. This goes through the development of electric vehicles of large capacity, and the creation of an infrastructure capable of providing the required charging energy, operated according to non-disruptive and grid-balancing principles.	http://cordis.europa.eu/ project/rcn/186997 en. html
EU	Plzen	ZEEUS	FP7	ZeEUS project focus on the today's challenge in the electrification of bus system, the extension of the fully-electric solution to a wider part of the urban network. This goes through the development of electric vehicles of large capacity, and the creation of an infrastructure capable of providing the required charging energy, operated according to non-disruptive and grid-balancing principles.	http://cordis.europa.eu/ project/rcn/186997 en. html
EU	Rome	ZEEUS	FP7	ZeEUS project focus on the today's challenge in the electrification of bus system, the extension of the fully-electric solution to a wider part of the urban network. This goes through the development of electric vehicles of large capacity, and the creation of an infrastructure capable of providing the required charging energy, operated according to non-disruptive and grid-balancing principles.	http://cordis.europa.eu/ project/rcn/186997 en. html
EU	London	ZEEUS	FP7	ZeEUS project focus on the today's challenge in the electrification of bus system, the extension of the fully-electric solution to a wider part of the urban network. This goes through the development of electric vehicles of large capacity, and the creation of an infrastructure capable of providing the required charging energy, operated according to non-disruptive and grid-balancing principles.	http://cordis.europa.eu/ project/rcn/186997 en. html

Funding Country	City/Regi on/Coun try	Project name and abbreviation	Co-funding body	Description	Link
EU	Glasgow	ZEEUS	FP7	ZeEUS project focus on the today's challenge in the electrification of bus system, the extension of the fully-electric solution to a wider part of the urban network. This goes through the development of electric vehicles of large capacity, and the creation of an infrastructure capable of providing the required charging energy, operated according to non-disruptive and grid-balancing principles.	http://cordis.europa.eu/ project/rcn/186997 en. html
EU	Stockhol m	ZEEUS	FP7	ZeEUS project focus on the today's challenge in the electrification of bus system, the extension of the fully-electric solution to a wider part of the urban network. This goes through the development of electric vehicles of large capacity, and the creation of an infrastructure capable of providing the required charging energy, operated according to non-disruptive and grid-balancing principles.	http://cordis.europa.eu/ project/rcn/186997 en. html

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