Electric Mobility Europe

Call 2016

Guide for Applicants

Call launch:

2 November 2016

Light proposal submission deadline:

6 February 2017, 17:00 CET

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Contents

This project has received funding from the European Union's Horizon 2020 Programme for research, technological development and demonstration under grant agreement no. 723977

1. The Electric Mobility Europe Call 2016 in brief

In collaboration with the European Commission and the European Green Vehicles Initiative Association, European countries and regions set up the Electric Mobility Europe Call 2016 (EMEurope Call 2016) to further promote and advance electric mobility in Europe. EMEurope builds on the experience, networks and results of the Electromobility+ Call 2010 (http://electromobility-plus.eu) and is designed to take transnational e-mobility research and policy exchange towards deployable solutions. Funded projects in the EMEurope Call 2016 shall focus on the application and implementation of e-mobility in urban and suburban areas.

This call responds to the need for transnationally coordinated Research and Innovation (R&I) to accelerate and advance the introduction and mainstreaming of electrification of mobility in Europe. The expected outcomes of these calls are likely to include an:

- Intensified uptake of e-mobility in urban and suburban areas;
- Improved connectivity between electric vehicles and the existing infrastructure;
- Increased choice for customers or consumers seeking to reduce the environmental impact of their travel.

In the EMEurope Call 2016 14 countries and regions and the European Commission are providing **research funds totalling some 23,000,000 EUR** for coordinated funding of Research & Innovation (R&I) projects. The EMEurope call follows a two-step submission and evaluation procedure, starting now with the submission of light proposals. In a next step a full proposal submission will follow for those proposals selected from the light proposal evaluation.

The EMEurope Call 2016 will be published on the EMEurope website http://www.electricmobilityeurope.eu. In addition, the national/regional programmes will publish the call according to their specific provisions.

Light proposals shall be submitted electronically in the EMEurope Call 2016 **until 6 February 2017, 17:00 CET**.

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2. The transnational call

2.1 Background and context

The European transport system is currently facing increasing challenges particularly regarding air pollution and climate change. In this context, electrification of vehicles is a forward-looking option, which provides significant potential for reducing transport-related air pollution, greenhouse gases and noise emissions. Setting the conditions for lifting electric mobility to the transport mainstream is a pan-European objective covering sustainable transport, environmental and climate protection, alternative energy and health policies. Moreover, incentives for European economic added value will be set, suitable for creating additional green jobs. Most of these policies are also relevant for national, regional and local levels throughout Europe in their endeavour towards sustainable development and decarbonisation.

To realise these goals, feasible solutions have to be deployed – specifically for urban and suburban areas. In recent years, a variety of initiatives for advancing electric mobility have evolved in European countries, regions and cities. As a result, the introduction of e-vehicles into the market has developed in a promising manner. However, a notable breakthrough and widespread uptake of e-mobility in Europe are still missing. Support for research, innovation, and joint policy initiatives can make a significant contribution towards achieving these objectives.

At present state, the first generation of electric vehicles has proven its potential, although there is still considerable room for improvement. While research and the development of novel technologies have progressed well, the integration of these technologies into the existing transport system still requires substantial effort especially in urban areas. Within the framework of Electromobility+, 18 research and innovation projects were funded, and the results of these projects have helped to increase knowledge and deliver important information for a wider uptake and roll out of e-mobility solutions throughout Europe. Moreover, it has provided policy makers and stakeholders across Europe with a variety of tools, scenarios, guidelines and models for introducing e-mobility.

A collaborative approach is essential to realise the ambition of effectively bringing electric mobility to the market: it encourages key players to come together on a European scale; it helps to identify and tackle the barriers for innovative products and services in the Single Market, and it facilitates joint usage of different sources of private and public funding. Today, EU funding remains a limited part of the overall funding across Europe. Implementation needs to be increasingly based on partnerships that build the necessary scale and scope to achieve greater impact from limited public and private resources.

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2.2 Challenges, scope and objectives of this call

The scope of the EMEurope Call 2016 is the result of an extensive elaboration process, involving countries and regions that participated in Electromobility+ and additional interested countries and regions, the European Commission (EC), the European Green Vehicles Initiative Association (EGVIA) and various stakeholders. Proposals shall deliver practical results feeding into innovation and deployment solutions for 2020 and beyond. Appropriate user and general public acceptance, regulatory issues, market up-take, social, environmental and resource efficiency aspects are important topics within the scope of this call. In principle, all modes of surface transport are relevant. Urban freight and logistics using e-mobility concepts are also in scope (e.g. electric and smart urban delivery fleets).

The EMEurope call will support R&I projects addressing the following key areas of electric mobility:

1. System integration (transport, urban and sub-urban areas);
2. Integration of urban freight and city logistics in e-mobility;
3. Smart Mobility concepts and ICT applications;
4. Public Transport;
5. Consumer behaviour and societal trends.

See chapter 3 for further details on the 5 key areas.

EMEurope projects shall support an optimised integration of electric mobility into the transport system. Instead of working on the development of new technologies, the projects shall aim at the testing and validation of existing close-to-market technologies and concepts. The project consortia shall include all relevant stakeholders for the application and implementation of electric mobility in cities and urban areas.

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Projects shall substantially contribute to the objectives of the EMEurope Call 2016:

- Accelerate the time to market for solutions for integrating electric mobility in Europe's (sub-)urban mobility systems;
- Establish and activate a network of policy decision makers and stakeholders for exchanging know-how and experiences on electric mobility solutions for European urban areas;
- Link policy, science and industry towards a joint support of electric mobility in European urban areas;
- Support industry, service sector, politics, authorities and users in their efforts to develop suitable and feasible solutions for electric mobility in European urban areas;
- Contribute to the European White Paper objective to promote zero emission mobility in European cities;
- Anticipate information/research trends and policy demand needs in 2020 and beyond
- Focus on passenger transport while considering urban freight and logistics;
- Consider issues of interoperability and compatibility;
- Consumer behaviour and societal trends.
- Provide new knowledge on efficiency, social aspects, regulation and conditions for market uptake.

The EMEurope Call 2016 will fund innovation projects focusing on the application and implementation of e-mobility with the objective of advancing the uptake and mainstreaming of the electrification of mobility in Europe. This initiative will provide about 23,000,000 EUR of funding to support applied innovation projects. The total funding is composed of national and regional funding and co-funding provided by the European Commission under Horizon 2020.

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2.3 Technology Readiness Levels

Projects supported by EMEurope will be subject to evaluation on the basis of Technology Readiness Levels (TRL) used to assess the maturity of a technology prior to its implementation (see table on next page).

EMEurope is particularly interested in projects between “proof of concept” and commercial income generation. Spanning the gap between these two points – the so-called “valley of death” – often requires public and private investment to generate sufficient evidence of a technology’s ability to be commercially viable.

Proposals shall focus on the application and implementation of solutions that have already reached TRL 5-6 or higher. Lower TRL research activities will only be in scope if they are necessary to support the action and forming an integral part of the proposal aiming for this higher TRL level.

Table 1 – NASA Technology Readiness Levels (TRLs)

Explanation of TRL levels, based on NASA in line with H2020

Level 1 - Basic Research: basic principles are observed and reported

Lowest level of technology readiness. Scientific research begins to be translated into applied research and development. Examples might include fundamental investigations and paper studies.

Level 2 – Applied Research: technology concept and/or application formulated

Once basic principles are observed, practical applications can be formulated. Examples are limited to analytic studies and experimentation.

Level 3 – Critical function, proof of concept established

Active research and development is initiated. Laboratory studies aim to validate analytical predictions of separate components of the technology. Examples include components that are not yet integrated or representative.

Level 4 – Laboratory testing of prototype component or process

Design, development and lab testing of technological components are performed. Here, basic technological components are integrated to establish that they will work together. This is a relatively “low fidelity” prototype in comparison with the eventual system.

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Level 5 – Laboratory testing of integrated system

The basic technological components are integrated together with realistic supporting elements to be tested in a simulated environment. This is a “high fidelity” prototype compared to the eventual system.

Level 6 – Prototype system verified

The prototype, which is well beyond that of level 5, is tested in a relevant environment. The system or process demonstration is carried out in an operational environment.

Level 7 – Integrated pilot system demonstrated

Prototype is near, or at, planned operational system level. The final design is virtually complete. The goal of this stage is to remove engineering and manufacturing risk.

Level 8 – System incorporated in commercial design

Technology has been proven to work in its final form under the expected conditions. In most of the cases, this level represents the end of true system development.

Level 9 – System ready for full scale deployment

Here, the technology in its final form is ready for commercial deployment.

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2.4 Budget of the call and funding providers

The following table reflects the availability on the committed minimum funding budgets of national/regional funding organisations participating in the call. The funding budget figures reflect tentative budgets reserved for applicants from the respective country/region.

The total available funding budget may be increased on the base of evolving national/regional opportunities in some cases.

Table 2 – Indicative national/regional funding amounts (incl. EC top up)

Country/Region	National/regional funding providers	EUR
Austria	Austrian Research Promotion Agency (FFG)	2,250,000
Belarus	National Academy of Sciences of Belarus (NASB)	1,500,000
Catalonia	Agencia per a la Competitivitat de la Empresa (ACCIÓ)	500,000
Denmark	Innovation Fund Denmark (IFD)	2,250,000
Finland	The Finnish Funding Agency for Innovation (TEKES)	3,000,000
Germany	Bundesministerium für Verkehr, Innovation und Technologie (BMVI)	2,250,000
Hungary	Ministry for National Economy (MNE)	1,500,000
Israel*	Israel Europe R&D Directorate (ISERD)	750,000
Netherlands	Stichting voor de Technische Wetenschappen (STW)	3,000,000
Piedmont	Finpiemonte S.p.A.	1,000,000
Poland	National Centre for Research and Development (NCBR)	1,000,000
Spain	Centro para el Desarrollo Tecnologico Industrial (CDTI)	1,000,000
Sweden	The Swedish Energy Agency (SWEA)	1,500,000
Turkey	The Scientific and Technological Research Council of Turkey (TUBITAK)	1,500,000
Total	EMEurope Call 2016	23,000,000

* The inclusion of ISERD is under preparation.

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3. Eligible key areas and research topics

This call is open for project proposals addressing one or more of the five key areas that have been defined in an extensive scoping process involving countries and regions, the EC, EGVIA and stakeholders:

1. System integration (transport, urban and sub-urban areas);
2. Integration of urban freight and city logistics in e-mobility;
3. Smart Mobility concepts and ICT applications;
4. Public Transport;
5. Consumer behaviour and societal trends.

These 5 key areas and potentially relevant research topics are elaborated in the sections 3.1 to 3.5 hereafter. It is advisable to contact the funding organisation in your country or region to check if specific research topics are eligible for funding.

Please consider that when submitting their proposals applicants must select one dominant key area in the Call Management Tool (CMT). Beside, any additionally addressed key areas can be indicated, if applicable (refer to paragraph 6.2 'Proposal submission in the Call Management Tool').

3.1 Key area 1: System integration (transport, [sub]urban areas)

The population living in European cities is rapidly increasing. While at the same time the number of electric cars is also rising. Multiple studies have demonstrated that electric cars are popular among citizens. A number of European cities are facing similar challenges: how to embed electric cars and especially charging infrastructure in the existing city infrastructure. There are a lot of advantages of e-mobility in the cities, like the mitigation of local noise and air pollution. Besides the evolution of e-mobility, including electric cars, there is a growing number of households and companies getting involved in or using decentralised generated energy and local storage. The local energy grid in the existing city centres has quite often not been designed to handle these new challenges. The combination of cities becoming popular for residents, the growth of e-mobility and development of decentralised energy generation and storage causes new challenges for (local) policy makers, grid owners, residents etc.

Over the past few years, national, regional and local governments have invested public resources, in some cases by public procurement, in public charging stations. The next logical step is to install smart charging stations that can charge whenever the driver or the service provider demands. The main challenge in smart charging of vehicle to grid is not the technical development, but is the implementation and large scale role out. Key issues

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include: legislation; taxation and the role of the different stakeholders in the scheme. Potentially, the major benefit is that the combination of charging and decentralised energy storage and generation can strengthen the business case for this technological approach. Significant benefits could accrue if local policy makers combine the decision making and business case development. Projects in this sector should also consider public acceptability and appropriate business case development.

Besides the above mentioned challenges, e-mobility has an impact on the physical environment of urban areas. The role of the e-bike in the ecosystem, the safety of current, as well as future charging systems, including inductive (dynamic and static) charging, are some of the main questions in this key area. The increasing number of electric cars requires the development of charging infrastructure in public areas as well as in multi-home dwellings and apartments. There is often historical information about the usage of these charging stations that can better inform policy development. The next steps should also include the roll-out of charging infrastructure forecast models including the optimisation of forecast issues and battery management.

Potential research topics

- The safety of electric vehicles and charging infrastructure, including the integration in the city (e.g. e-bike paths);
- e-mobility adjusted and shared infrastructure (incl. inductive charging) and housing;
- ICT applications for optimisation of forecast issues and battery and charging infrastructure management;
- Options for easy models for system integration for decision makers;
- Models for the forecast and management of charging locations based on real-trials;
- The integration of sustainable urban mobility and energy plans in urban areas;
- The influence of decentralisation of energy production and consumption on the integration and development of urban areas;
- The role of public procurement of zero emission electric vehicles and the tasks, responsibilities and competences of the different stakeholders;
- The integration of EV requirements and charging infrastructure in buildings regulations;
- The development of business models to use batteries (once their ability to charge EVs has ceased) to balance the energy grid.

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3.2 Key area 2: Integration of urban freight and city logistics in the e-mobility

The concept of city logistics has different facets. It includes the total optimization of the urban freight transport system, shared distribution centers, consolidated freight deliveries, sustainable distribution networks and delivery vehicles, as well as partnerships between public planners and logisticians. Whilst companies seek to optimize their system by themselves, most innovative solutions developed in City Logistics do not go beyond the development and demonstration stages to reach economic viability. This is mainly due to underestimated transaction cost and a mismatch between the goals and responsibilities of public planners and private logistics firms. In future, electric mobility can be a crucial component for sustainable urban logistics solutions.

For long-distance freight transports, electric mobility has not yet proven to be a suitable option. There are some technical obstacles that prevent the successful implementation for vehicles with a daily mileage between fifty and two hundred kilometers and with many stops. These challenges also apply to vehicles in the last mile distribution, including urban areas. Fully battery powered vehicles have advantages for urban areas due to their low noise and zero local air pollutant emissions.

Under current urban transport policies and market conditions, the economic viability of electric freight transport is only profitable in some small niche applications. With further cost decreases and advanced vehicle developments, additional benefits will arise for the operators. Electric freight vehicles could quickly become integral components of new innovative urban distribution concepts.

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Potential research topics

- Research and development to improve existing electric vehicle technology towards the integration of electric vehicles into urban distribution systems for zero emission logistics;
- Innovative solutions to capture freight demand characteristics and improve corresponding logistics solutions with the aim of integrating electric vehicles into urban distribution systems for zero emission logistics;
- Determine which freight and fleet operations lend themselves to replacement by EVs and ways in which cities or roads can be configured to encourage this access;
- Development and exploration of practical solutions for the integration of electric vehicles in existing fleets (deployment of mixed fleet) and appropriate business models to support this;
- Better understand and meet the need of customer requirements in urban last mile freight transport and development of suitable distribution concepts with tailored services and employment of different kinds of electric vehicles (electric cargo bikes, electric vans and electric trucks);
- Development of business cases and organization models for last mile delivery with integration of electric vehicles; ex-ante assessment of new distribution concepts based on electric vehicles in order to analyse and improve business cases. Joint innovations of electric vehicles, vehicle deployment, logistics structures and operation planning are of particular importance;
- Supporting sharing and rental concepts for last mile electric vehicles to facilitate user experience with and acceptance of such vehicles and sharing concepts;
- Introducing electric mobility in existing public private freight partnerships and networks; supporting joint efforts of public planners and logistics companies to introduce electric vans into urban transport. Studying the individual and societal acceptance of electric mobility in urban freight transport and last mile delivery;
- Sharing of charging infrastructure for passenger and freight vehicles including capacity management; combined passenger and freight transport systems for urban areas based on electric vehicles;
- Evidence to support strategic recommendations for logistics companies regarding best practices of e-vehicle deployment and for the public sector regarding accompanying policy measures.

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3.3 Key area 3: Smart Mobility concepts and ICT applications

E-mobility poses significant challenges as the transition from oil-driven to zero-emission transport is a long and complex process. To ensure best possible effects, advanced smart mobility concepts must be designed and combined with the recent advances in ICT. Currently, among the main obstacles in convincing people to switch to electric cars are perceptions of limited range, sparse infrastructure and relatively long charging times. Well designed and implemented smart e-mobility developments and operating models can provide more sustainable ways of travelling without exposing people to the current technological limits, and thus give new momentum to the ultimate switch to zero-emission mobility.

Research, Technology and Innovation in this sector has the potential to unlock and promote a significant number of benefits to the public utilising e-mobility solutions, which are likely to include; more efficient use of the public charging infrastructure (slow, fast and rapid), more people utilising smart charging devices at home and large-scale multi-modal e-mobility services that enable people to easily travel on a daily basis using only electric vehicles. In addition, business solutions for smart grids and e-mobility will need to be tightly integrated via modern ICT technologies.

The public will be encouraged to start using e-vehicles for different modes of travel (privately-owned, shared or public vehicles). This is likely to increase the share of electric vehicles on the market. New business models could be developed to enable large-scale multi-modal e-mobility services that ensure the public could more easily access travel on a daily basis using only electric vehicles, for instance, the launch of first autonomous e-taxi services in Europe.

Potential research topics

- Development of flexible e-car and e-bike sharing systems with support for cross-modal e-mobility chains (also including electric buses, trams and trains) and assisted parking search (via smart phone apps);
- Designing and implementing ride-sharing (carpooling) services, especially for daily commuting by means of e-vehicles (home, neighbourhood and/or work-centred solutions);
- Developing autonomous (shared) e-taxi and e-minibus services that aim at removal of private car traffic from city centres and integrating them with fixed-route public transport;
- Exploitation of big data (such as mobile phone data) to understand daily travel patterns and their day-to-day fluctuations in order to develop competitive and robust e-mobility services;
- Designing smart grid solutions for charging e-vehicles both at home and work by providing assistance with long-term and short-term decisions, such as choosing the

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charging scheme, or the right time and place to charge, taking into consideration the overall impact on the grid;

- Implementation of decision-support tools that aim at estimating induced electricity demand related to predicted future trends in e-mobility and optimising further development of the existing vehicle charging infrastructure;
- Development of smart phone trip planners for private e-car users that (1) offer choice between multiple criteria, and (2) use precise and adaptive (driver/car-dependent) models for energy consumption in order to avoid running undercharged, and (3) scheduling possible stops at charging stations along the route;
- Identification and development of business models for cooperation between all parties engaged, such as public transport operators, e-car(bike)-sharing operators, electricity providers, company fleet operators and end users, to harmonise development of future mobility as a service and e-mobility service concepts.

3.4 Key area 4: Public Transport

Public transport is the key element for improving mobility of people in the future, especially in urban areas. The main reason is the relatively poor efficiency of private modes in terms of consumption of shared resources. For example, in Barcelona the average load factor of private transport is 1.3 passengers per car which is very inefficient in terms of space utilisation and emissions. However, there are some significant challenges to improve the shift in modal change that is required.

E-mobility has a strong potential to favourably impact both public and personal rapid transport. The Government administration and public agencies in Europe often have direct influence on the decision-making process that allows the creation of a suitable framework to promote the adoption of electrical solutions in public transport companies. The operation of EVs in optimised systems could have a strong impact on the environment that could be used to promote the social adoption of EVs. Electric buses are likely to be the focus for urban mobility of the future as they allow sustainable operation and flexible networks, adapting routes and frequencies easily to demand. In addition, it allows for the planning of scalable investments with the growth of modal share. An alternative solution, the tram, requires higher capital expenditure and operating expenses in a rigid infrastructure. If the bus service has measures of priority in the street it might be competitive to trams.

Personal rapid transport allows the introduction of electrical innovations that improve the performance of mobility; especially with access to larger public transport systems that requires intermodal connectivity or for shorter journeys. For example, shared e-bicycle systems have demonstrated a strong potential to create a new market of users who adopt this mode of transport for commuting or leisure trips.

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Innovative solutions are key to allowing operators and agencies of public transport to achieve a better performance for the whole transport system to achieve a greater part of the market share that is currently held by private modes. “Mobility as a service” concepts may require smaller sized public transport in the future. Also increasing automation may have significant consequences.

Potential research topics

- Research and development to improve the charging technology for busses, which is critical for operational improvement of the performance (including; reducing idle times due repositioning of batteries);
- Development of shared platforms for trams and buses, where buses could be connected to catenaries in the main sections of the network;
- Development and test technology that allows buses to operate connected to catenaries or be autonomous in remote sections;
- Research that takes a holistic approach to the whole public transport system that introduces priority measures to improve performance and quality by taking advantage of the introduction of new electric technology;
- Development of new concept of electric buses, which allows operators to achieve better performance on operating costs through a scalable design to adapt supply to demand (without wasting time with complicated connections), increase capacity in peak-hours and reduce boarding and de-boarding times with functional designs of the interior of the bus;
- Development and exploration of Internet of Things (IoT) solutions to support the tracking and monitoring systems for public transport. Part of this technology has to accurately measure key performance indicators related to sustainable efficiency. The comparison with traditional mobility is a boost to encourage administrative authorities to continue to support these innovative actions;
- Development of demonstrators of charging systems for electric buses in bus stations and head-stops. Optimising and testing remote and/or inductive charging systems;
- Development of demonstrators for testing EVs and charging in extreme weather conditions, e.g. in polar areas;
- Research and development of demonstrators related to electric personal rapid transport in the field of public transport, e.g. shared e-bicycle systems;
- Testing not only of the vehicle, but also propose pilots related to the management of the whole system (patterns of mobility, user requirements, fleet sizing, operation of rebalancing).

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3.5 Key area 5: Consumer behaviour and societal trends

Consumer behavior and societal trends take electric mobility to the heart of our daily life. To implement electric mobility effectively into the overall societal context, the acceptance of the consumer and a feasible legal frame should be the main focus for developing and implementing electric mobility in urban and suburban areas. Many municipalities across Europe have developed and implemented new mobility concepts to solve their traffic problems during the last years. Electric mobility should be part of the overall strategies of Governments and local municipal administrations.

Building on previous funding and developments, the technical challenge is no longer the main focus of the implementation phase of electric mobility. However, the emphasis has shifted to public acceptability of the e-mobility technology and the key aims to reduce adverse health and environmental impacts of transport. It is important that consumers and stakeholders be part of the overall development of a strategy to implement e-mobility solutions which fit the needs and legal responsibilities of the implementation strategy.

For this call, it will be important to have a synthesis of research that has already been undertaken to better understand customer behaviour when deciding to purchase or utilise e-mobility for transport needs including the following: reliability, expectations of electric vehicles to meet the need of value for money, comfort, safety, performance, fuel consumption and innovative design. In addition, consumers' perception of range limitation or possible safety and security concerns need also to be addressed.

New business and operating models including e-mobility sharing schemes will need to take account of consumer behaviour and acceptability. E-mobility has the potential to disrupt current value and supply chains especially of those of motor vehicle manufacturer's, and it would be imperative that a better understanding is developed of potential risk, but also the opportunities and benefits realisation that could be achieved.

Therefore, projects in this key area should take into account those stakeholders that need to be integrated into the process and to determine their needs and frames of reference as the development and implementation of electric mobility proceeds. In a European context, the feasibility of dissemination of the findings of the project group to national level is vital to ensure the adoption of e-mobility.

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Potential research topics

- Feasible models for system integration for decision makers;
- Involvement of users in order to provide adequate/better services;
- National or regional policies and strategies for supporting electric mobility;
- Regulations and standards, interoperability, compatibility of charging payment solutions;
- Fiscal measures, local planning measures, integration into the transport system or new mobility strategies;
- Stimulate consumers awareness by consumer information or combining electric mobility with successful mobility concepts;
- Application in vehicle fleets (e.g. for municipal services, taxis, public transport);
- Electric car sharing system, rental system of city electric vehicles;
- Policies and strategies for the establishment of a second hand market for e-mobility;
- Better understand public acceptability to use EVs to balance the electricity grid and the possible implications for battery life;
- Better understand public acceptability to the concept of new business models in car ownership such as the leasing of the battery.

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4. Formal conditions of the call

4.1 Legal/administrative rules and eligibility issues

Definitions in the following chapters constitute the **common call framework of transnational eligibility criteria** for the EMEurope Call 2016, which is applicable for all participants and funding organisations. The EMEurope Call Secretariat will check the submitted proposals against these common transnational specifications. The call is however also based on specific national and regional legal and administrative rules of the participating national and regional funding programmes.. There is a bilateral responsibility between applicants from a particular country or region and their responsible national or regional funding organisation. Thus proposals will be also checked against applicable national/regional criteria by the respective funding organisation.

Applicants shall therefore always refer to their respective national/regional rules, conditions and specifications. Main applicable specifications are outlined in the 'National/regional specifications and contacts' (Annex to this document) with reference to further national/regional information documents, websites and contacts. More comprehensive information about related national/regional funding programmes and calls can be accessed via the indicated websites in the Annex.

Both transnational and national/regional eligibility criteria must be met. Proposals failing to comply with either of the criteria cannot be admitted to the evaluation procedure and will be rejected.

By submitting a proposal applicants agree that their proposal will be forwarded to the responsible national/regional funding organisations and the evaluators for an eligibility check and assessment. Basic project information (summary, costs, requested funding, partners etc.) will also be transmitted to the other participating funding organisations of this call. National/regional funding organisations and evaluators shall maintain strict confidentiality with respect to the proposals and the whole evaluation process.

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4.2 Proposal preparation, information and documents requested

Proposals must be prepared and submitted electronically through the electronic tool called 'Call Management Tool' (CMT). For this purpose a 'CMT manual' is available for download under http://www.electricmobilityeurope.eu. Only those proposals submitted in the CMT system before the closure of the call will be considered for evaluation.

The applicants shall be aware that national/regional rules apply and therefore consult closely the specific national/regional conditions. For some countries/regions additional documents or data may be required by the indicated national/regional contact points. The corresponding national/regional specifications are provided in the Annex of this document.

The CMT provides proposal templates to be filled in. Only fully completed proposals can be submitted. The CMT will automatically indicate if requested information is incomplete. A full explanation of the proposal template and information requested can be found in the CMT manual. The CMT will generate a .pdf document of your proposal for download.

Proposals shall be submitted in English. Other languages shall not be accepted and such proposals shall be considered ineligible. Applicants preparing their proposals are strongly advised to get in touch with their responsible national/regional funding organisation at an early stage to clarify individual questions and to request information on the specific national/regional regulations and requirements. A pre-proposal check service may be offered – or even required – by some of the participation funding organisations (see Annex for details and contacts).

A call related international Information and Brokerage event will be organised on 25 November 2016 in order to provide general call information and options for networking with potential partners in other countries/regions. Web-based tools for networking of researchers (partnering) will be provided. Additional information on the EMEurope Call 2016 can also be found at the EMEurope website: http://www.electricmobilityeurope.eu.

Please find further information about the proposal preparation in chapter 6 ('How to apply'') and in the 'CMT manual'.

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4.3 Eligible project consortia, costs and duration

Each transnational project proposal shall be submitted by a consortium composed of **at least three independent eligible applicants** from **at least three different call participating countries**. The call is open for applicants from other than the funding countries (third countries), but those cannot apply for EMEurope funding and do not count for the country threshold requirement.

Consortia need to be balanced between countries/regions in terms of number of partners, geographical coverage and distribution of budget. The added value resulting from transnational cooperation shall be properly addressed in the proposal.

There is no limit to the total number of partners to be involved in each project and there are no fixed minimum or maximum limits for the project costs. However, no single country or region of a project consortium shall request **more than 70% of the eligible costs** in the project. The joint requested funding of the two partners applying for the highest funding shall **not exceed 85% of the eligible costs**.

Project consortia may consist of partners from universities, research organisations, institutes, stakeholder associations, city councils, SMEs industry and operators. Consortia have to include stakeholders and/or implementation partners and may consist of partners active across several positions within the research and development system (i.e. innovation, applied research, strategic research) and across disciplines. Consortia are required to prove the interest and active involvement of project partners in the consortium, who (either within the project or as a consequence thereof) will implement the solutions developed:

- Including stakeholders or implementation partners in the consortium who are eligible for funding; or
- Having stakeholders or implementation partners not eligible for funding, who express their interest in the proposal in a Letter of Intent. The letter shall contain an explicit declaration about the financial or in-kind contribution agreed upon. In-kind contributions are contributions in man-hours of personnel or material contributions such as the use of specific software and access to facilities. In-kind contributions shall be capitalised in the Letter of Intent and constitute an integral component of the project plan. The amounts stated in the letter must match the amounts stated in the budget for the proposal.

The project duration (official start to end of the project) shall be appropriate to the subject of the research, but shall **not exceed 30 months** in total.

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5. Two-step submission and evaluation procedure

The EMEurope call follows a two-step submission and evaluation procedure:

Step 1	Open call for light proposals
	Evaluation of light proposals by national/regional experts
Step 2	Invitation of full proposals (successful proposals after first step evaluation)
	Evaluation of full proposals by international peer review

A two-step submission and evaluation procedure ensures the selection of best quality proposals to be invited for full proposal submission in Step 2. It is necessary to guarantee that only entities eligible for funding under the national/regional funding rules are invited to Step 2. Furthermore it enables EMEurope funding partners to balance requested funding and available funding for each participating country and region between Steps 1 and 2. The submission and evaluation process will be supported by a web-based tool, the CMT. Step 2 of the evaluation process will be monitored by an independent observer and an EC representative.

5.1 Submission and evaluation of light proposals: Step 1

The applicants shall prepare and submit their light proposal by means of the CMT.

Completeness and eligibility check

At the beginning of the evaluation process the Call Secretariat will make a completeness check of all received proposals and will indicate by a note any possible eligibility issue identified. This includes checking compliance of proposals with the stipulated minimum criteria.

Subsequently, the Call Secretariat will request the respective national/regional funding organisations to formally check in the CMT proposals involving applicants from their country/region for national/regional eligibility.

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If either the project proposal coordinator (consortium coordinator) or the proposal does not meet the eligibility requirements, the proposal shall be excluded from further evaluation procedure. In case a single applicant of a project consortium is not eligible, the proposal may still be eligible without this partner, provided that the other eligibility criteria are met. In both cases, this will be communicated to and via the consortium coordinator.

National/regional experts and evaluation criteria

For the qualitative assessment in Step 1 of the evaluation eligible proposals will be forwarded to experts nominated by the national/regional funding providers. The experts will be selected according to their expertise in relation to the addressed key area and topics in the proposal.

These experts will assess proposals according to the call evaluation criteria and provide a qualitative assessment of the proposals along the criteria of H2020: Scientific and/or technical excellence, Implementation and Impact.

Since this stage considers the submission and evaluation of light proposals (Step 1), no detailed scores will be given, but the quality assessment dimensions will be used as guidance to establish the recommended general mark of a proposal:

- Red (proposal not to be invited for full proposal submission);
- Yellow (proposal to be invited for full proposal submission, with conditions);
- Green (proposal to be invited for full proposal submission, without conditions).

Table 3 – Quality assessment dimensions H2020

EXCELLENCE	IMPACT	QUALITY AND EFFICIENCY OF THE IMPLEMENTATION
• Sound concept and quality of objectives in line with the call challenges, objectives and scope; • Progress beyond the state-of-the-art; • Quality and effectiveness of the scientific and technological methodology and associated work plan.	• Contribution at the transnational (and/or European) level to the expected impacts listed in the call text under the relevant domain(s); • Appropriateness of measures for the dissemination and/or exploitation of transnational projects results and management of intellectual property.	• Appropriateness of the management structure and procedures; • Quality and relevant experience of the individual applicants; • Quality of the consortium as a whole (including complementarity, balance); • Appropriateness of the allocation and justification of the resources to be committed (budget, staff, equipment …).

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Consensus-making on the invitation for full proposals

The Call Secretariat will compile the national/regional assessment results as basis for a (remote) consensus meeting of the involved experts. At the end of this meeting a list of consortia to be invited to prepare a full proposal will be sent as recommendation to the EMEurope Governance Board (GB).

The GB will agree on a list of project proposals to be invited to Step 2 of the evaluation. This decision will also consider a balanced thematic and wide geographical coverage of and within the selected proposals, as well as the available funding amount in total and per country/region.

Proposals might be invited for full proposal submission with recommendations, which should be considered for improving the application, and/or conditions, which have to be met by the consortium. After submission of full proposals and before forwarding them to the independent experts, compliance with conditions will be verified and a final quality check will be performed to ensure that no unjustified changes have been made.

Applicants shall have no possibility for rebuttal to the evaluation result.

5.2 Submission and evaluation of full proposals: Step 2

Selected light proposals in Step 1 will be invited to submit a full proposal, considering possible conditions to be met. Each full proposal will be subject to Step 2 of the evaluation carried out by a peer review of independent international experts. These experts are required to be independent from the involved EMEurope partners and no Conflict of Interest (CoI) shall exist with the proposal evaluated. They shall furthermore substantiate a high level of professional experience in general and specific skills and knowledge for covering their assigned areas of activity. Experts will be selected after agreement on the invitation list for full proposals, i.e. once the required expertise is known. The list of selected experts for the peer review has to be approved by the GB and the EC.

On invitation for Step 2 the applicants are asked to prepare and submit the full proposal using the CMT. The CMT comprises respective entry masks and functions.

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After the full proposals have been formally submitted, the Call Secretariat will perform a completeness check and the funding providers will run a final national/regional eligibility check. Each proposal passing this check will be assessed remotely via the CMT by a panel of three experts, who will base their evaluation solely on the quality of the full proposals. EMEurope will stick to the evaluation criteria, scores and thresholds for H2020:

- Excellence;
- Impact;
- Quality and efficiency of the implementation.

Scores for each criterion range from 0 to 5 with a threshold of 3. Overall threshold for all three dimensions is 10.

The second phase of the full proposal evaluation will be carried out in a two day meeting with all independent experts. On the first day each panel of three experts will come to a consensus regarding the scores for the particular proposal(s) assessed resulting in a draft ranking list of full proposals. On the second day, in a plenary session, all experts will come to a consensus on the final ranking of the assessed proposals. The outcome will be a ranking list of proposals to be strictly followed by the funding partners in order to preserve full EC top-up (until EC funds are exhausted). The ranking list will be forwarded to GB and EC.

The on-site evaluation of full proposals will be monitored by an independent observer and an EC representative.

5.3 From ranking of full proposals to funding of selected projects

The next step will be composing a common selection list of project proposals retained for funding. The common selection list shall stick to the ranking list and will have to be approved by the GB and EC.

Subsequently decentralised negotiations with selected proposals and preparations of grant agreements/funding contracts will start. Selected projects for funding are envisaged to start late 2017/early 2018.

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5.4 Timeline

Date	Step
Light proposals	
02 November 2016	Launch of the call for light proposals
25 November 2016	Information and brokerage event
06 February 2017	Closure of call for light proposals
February/March 2017	Evaluation of light proposals (national/regional experts)
Full proposals	
March/April 2017	Invitation of consortia to submit a full proposal
May/June 2017	Closure of call for full proposals
July/August 2017	Evaluation of full proposals (transnational peer review)
September/December 2017	Negotiations full proposals selected for funding
December 2017/January 2018	Start of Research & Innovation projects transnational call

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6. How to apply

6.1 General requirements

The project proposal coordinator

For a given project proposal, the project proposal coordinator (consortium coordinator) acts as the single point of contact between the consortium and the Call Secretariat. The coordinator is responsible for the overall planning of the proposal and for building up the transnational consortium.

Focusing your planned work

One major key area most relevant for the proposal must be identified and indicated in the CMT (please refer also to chapter 3).

Who can participate?

See chapter 4 ‘Formal conditions of the call’.

Presenting your proposal

Proposals shall be prepared and submitted electronically via the CMT. Only proposals duly submitted in the CMT portal before the closure of the call shall be considered for evaluation.

The applicants shall be aware that national/regional rules apply and shall therefore consult carefully the specific national/regional conditions. **For some countries/regions additional documents or data may be requested by national/regional programmes and shall be submitted to the enlisted national/regional specifications (see Annex).** A link to webpages on corresponding national/regional information and requirements will be provided at the EMEurope Webpage www.electricmobilityeurope.eu.

Components and content of the light proposal

Detailed information about components and contents of the light proposal and permissible text length for each component can be found in the CMT.

Proposal submission in the Call Management Tool

Only the proposal coordinator is authorised to submit the proposal.

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You can access the CMT via the EMEurope call website at http://www.electricmobilityeurope.eu.

Full instructions for registration and submission can be found there in the 'CMT Manual'. The CMT will be available shortly after the call opening on 2 November 2016.

The proposal coordinator shall:

- Register as interested in submitting a proposal to the call;
- Enter data as the applicant No. 1 of the consortium;
- Confirm to be informed about national/regional rules and requirements;
- Set up (and modify) the consortium by adding/removing applicants;
- Provide information on dependencies to other applicants in the proposal;
- Invite partners to insert their data;
- Enter all project data requested (see CMT manual);
- Submit the complete proposal.

All **partners** shall:

- Insert and view their data as applicants No. 2, 3,… of the consortium;
- Confirm to be informed about national/regional rules and requirements;
- Provide information on dependencies to other applicants in the proposal.

Completing all web forms in the CMT does **not** yet mean that the proposal has been submitted. Once there is a consolidated version of the proposal, the coordinator has to press the button "SUBMIT NOW" available in section "SUBMISSION".

Please note that "SUBMIT NOW" only starts the final steps for submission! It does not by itself result into the proposal being submitted.

The CMT then performs an automatic validation of the proposal. A list of any problems ("validation error message") such as missing data may then appear on the screen. **Submission is blocked until these problems are corrected.** Hence the coordinator must then repeat the above steps to resume and complete submission.

Subsequently, the coordinator receives a message indicating that the proposal has been received. This automatic message is not yet the official definite acknowledgement of receipt.

The coordinator may still continue to modify/improve the proposal until the deadline by submitting revised versions, thereby overwriting the previous. In that case the entire sequence above must be repeated each time.

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The coordinator can download a PDF file of the proposal from the CMT.

Submission is deemed complete when the proposal coordinator has executed the submission sequence described above.

6.2 Submission deadline

Proposals shall be duly submitted by the Coordinator before the **deadline on 6 February 2017, 17:00 CET**. The Coordinator is fully responsible to ensure the timely submission of the proposal and is hence strongly advised not to delegate this job!

The CMT will be automatically closed at precisely the call deadline, after which no submission will be possible anymore.

Therefore, the coordinator should not wait until the very last moment for submitting the proposal! Call deadlines are absolutely firm and will be strictly enforced by the system, no extenuating circumstances shall be considered.

As a conclusion, please note that it is wise to submit successive drafts of the proposal to the CMT. Each successive submission overwrites the previous one. The coordinator should submit an even preliminary draft well before the deadline.

In the unlikely event of a failure of the CMT portal due to breakdown of the EMEurope Call 2016 server during the last 24 hours of this call, the deadline may be extended by a further 24 hours. This would be notified by e-mail to all proposal coordinators registered for this call by the time of the original deadline, and also by a notice on the EMEurope webpage and on the webpage of the CMT.

6.3 Correcting or revising the proposal

Errors discovered in proposals submitted to the CMT can still be rectified by simply submitting a new version that will overwrite the old one, however only as long as the call is open.

Therefore the last version of the proposal duly submitted before the deadline is the one to be evaluated, if eligible.

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6.4 Ancillary documents

Ancillary documents of the proposal can be uploaded (e.g. Letter of Intent).

Further information or documents possibly requested by national/regional programmes shall be submitted directly to the respective national/regional contact points according to specific instructions from national/regional programmes (refer to Annex). Do not upload these materials to the CMT as they will not be forwarded to the responsible national/regional funding organisations!

6.5 Withdrawing a proposal

An option to withdraw (delete) the proposal prior to the call deadline will be available.

Should the consortium wish to withdraw a proposal after the deadline, please contact the EMEurope Call Secretariat.

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7. Check list

Important issues for the consortium, in particular for the proposal coordinator:

7.1 Hints for preparing your proposal

Does your planned work fit with the focus of this call as documented in this Guide for Applicants? Check that your proposed work does indeed address one or more of the key areas and contribute to the objectives of EMEurope 2016 Call.

Does your proposal meet the transnational eligibility criteria? You find the general call criteria and requirements summarised in the following table. If your proposal does not meet these formal transnational criteria, the proposal shall be excluded from further evaluation.

Summary of transnational eligibility criteria to be met:

- Proposals must be submitted in the CMT, in English, timely before the call deadline on 6 February 2017, 17:00 CET;
- A consortium shall be composed of at least three independent eligible applicants from at least three different call participating countries;
- No single country or region of a project consortium shall request more than 70% of the eligible costs in the project;
- The joint requested funding of the two partners applying for the highest funding shall not exceed 85% of the eligible costs;
- Consortia shall be balanced between countries/regions in terms of number of partners, geographical coverage and distribution of budget;
- The added value resulting from transnational cooperation shall be properly addressed in the proposal;
- Consortia shall include stakeholders and/or partners that maximize chances of a successful implementation of the solutions developed and are required to prove the interest and active involvement of these partners;
- Proposals shall focus on demonstrating and validating solutions that have already reached TRL 5-6 or higher. Lower TRL research activities shall only be in scope if they are necessary to support the action and forming an integral part of the proposal aiming for this higher TRL level;
- The project duration (official start to end of the project) shall be appropriate to the subject of the research, but shall not exceed 30 months in total.

In addition to these requirements, in order to maximise the chance of a successful project, we strongly advise you to also consider in your proposal and consortium composition further recommendations and advice provided throughout this GfA.

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Does your proposal meet the country/region specific eligibility criteria? Check the annex 'National/regional specifications and contacts'. If your proposal does not meet the respective formal national/regional criteria, the proposal shall be excluded from further evaluation.

Is your proposal complete? All fields marked with an asterisk (*) are mandatory for the submission of the proposal. The CMT will perform an automatic validation of the proposal. A list of any problems ("validation error message") such as missing data will appear on the screen and **submission is blocked until these problems have been corrected.**

After submitting the proposal, the proposal coordinator can download a factsheet (PDF) of the project data entered in order to check completeness according to the project and the applicants.

Does your proposed work raise ethics issues? Clearly indicate any potential ethical, safety or regulatory aspects of the proposed research and the way these will be dealt with prior and during the implementation of the proposed project. A preliminary ethics control will take place during the scientific evaluation and, if needed, an ethics screening and/or review will take place for those proposals raising ethics issues. Proposals may be rejected on ethical grounds if such issues are not dealt with in a satisfactory manner.

Does your proposal follow the instructions? Proposal data shall be precise and concise and follow the instructions and explanation of data field sections described in the CMT manual. Omitting requested information will almost certainly lead to lower scores and possible rejection.

Have you maximised your chances? There will be strong competition. Therefore, edit your proposal tightly, strengthen or eliminate weak points. Arrange for your draft to be pre-evaluated by experienced colleagues; use their advice to improve it before submission and make use of the pre-proposal check service (if provided by your responsible national/regional funding organisation).

Do you need further advice and support? You are strongly advised to inform your National Contact Point of your intention to submit a proposal well beforehand (see contact details in the Annex).

Have national/regional rules been duly considered by the applicants? All applicants in your proposal shall be aware that national/regional rules do apply and therefore consult closely the specific national funding conditions. The CMT will indicate and link to such information.

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7.2 Final checks before submission

- Do you have the **agreement of all the members** of the consortium to submit this proposal on their behalf?;
- Have you made yourself **familiar with the CMT** at an early stage?;
- Have you allowed time **to submit a first version of your proposal well in advance of the deadline** (at least several days before) in order to continue improving it with continuous re-submissions?;
- Have you **printed out your proposal** (factsheet with project data entered) to check that it really contains the data you intend to submit and that it is complete, printable and readable? After the call deadline it will not be possible to change any project data;
- Have you **completed the submission process** for your latest version?

7.3 Final checks after submission

- It is recommended to check that all your material has been successfully uploaded **and** submitted;
- You can revise and re-submit your proposal until the call deadline;
- Inform your consortium whether or not the submission of the proposal has been successful and share the submitted documents.

7.4 What happens after submission?

Every proposal coordinator will be informed by the Call Secretariat whether or not his/her proposal will be invited for full proposal submission. Proposals rejected will receive no detailed explanation. Proposals invited for full proposal submission may receive recommendations and/or conditions. Whereas recommendations should be considered to further improve the quality of your proposal, conditions are mandatory to meet in the full proposal. The proposal coordinators shall inform their consortium partners respectively.

For the full proposal submission invited consortia will receive a specific Guide for Applicants, a specific CMT Manual and a concrete deadline for the submission of the full proposals.

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8. Further information and help

The EMEurope Call 2016 website contains links to additional sources that you may find useful for preparing and submitting your proposal:

Call information

General information on the EMEurope Call 2016 on http://www.electricmobilityeurope.eu.

CMT user manual

User manuals for the CMT (versions 'proposal coordinator' and 'partners') are available for download on http://cmt-electricmobilityeurope.eu/login.php.

EMEurope Call Secretariat

For questions about submission, evaluation and eligibility of proposals and about the CMT, please refer to the EMEurope Call Secretariat: callsecretariat@electricmobilityeurope.eu.

Brokerage tool - matchmaking

Applicants may use the ETNA 2020 brokerage tool for matchmaking: http://www.transport-ncps.net/partner-search. Applicants can leave their organisation profile, project ideas and interests and search for those of other applicants.

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Glossary

The following explanations are provided for clarity and easy reference. They have no legal authority.

A

Acknowledgement of receipt

Applicants are informed by email shortly after the deadline that a proposal has been successfully submitted (but not that it is necessarily eligible).

Applicant

The term used generally in this guide for a person or entity applying to a call for proposals.

C

Call for proposals (or 'call')

An announcement, usually in official journals, inviting proposals for research activities in a certain theme.

Call Management Tool (CMT)

A web-based service which must be used to submit proposals to the EMEurope Call 2016.

Consensus meeting

Last stage in the proposal evaluation process, when funding organisations come together for joint decision making on the selection/rejection of proposals.

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Consortium

This call requires proposals from a number of applicants who agree to work together in a consortium.

(National/regional) Contact

Official representatives nominated by the national/regional funding organisations to provide tailored information and advice in the national language(s).

(Project proposal) Coordinator

The coordinator of a project proposal leads and represents the applicants of a consortium. The coordinator acts as the point of contact for the EMEurope Call Secretariat. The proposal coordinator is by definition the 1st applicant of the consortium.

D

Deadline

For a particular call, the moment after which proposals can no longer be submitted and when the Call Management Tool (CMT) closes for that call. Deadlines are strictly enforced.

E

Ethics issues table

Research activities supported by the EMEurope Call 2016 shall respect fundamental ethical principles. The main issues which might arise in a project are summarised in tabular form in a checklist included in the proposal.

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Evaluation criteria

The criteria against which eligible proposals are assessed by experts. The evaluation criteria relate to the scientific and/or technological experience, impact and implementation. Additional criteria as described in this Guide for Applicants might also be considered.

Experimental development

‘Experimental development’ means the acquiring, combining, shaping and using of existing scientific, technological, business and other relevant knowledge and skills for the purpose of producing plans and arrangements or designs for new, altered or improved products, processes or services. These may also include, for example, other activities aiming at the conceptual definition, planning and documentation of new products, processes and services. The activities may comprise producing drafts, drawings, plans and other documentation, provided that they are not intended for commercial use.

F

Fundamental research

‘Fundamental research’ as part of applied research means experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts, without any direct practical application or use in view.

I

Industrial research

‘Industrial research’ as part of applied research means the planned research or critical investigation aimed at the acquisition of new knowledge and skills for developing new products, processes or services or for bringing about a significant improvement in existing products, processes or services. It comprises the creation of components of complex systems, which is necessary for the industrial research, notably for generic technology validation, to the exclusion of prototypes as covered by ‘experimental development’.

Information and brokerage event

Open event to explain the characteristics of the call and to enable potential applicants to meet and discuss proposal ideas and collaborations.

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N

Negotiation

The process of establishing a grant agreement/contract between the national/regional funding organisations and an applicant whose proposal has been favourably evaluated, and when funds are available (only applicable after the selection of the full proposal).

Non-profit

A legal entity is qualified as ‘non-profit’ when considered as such by national or international law.

O

Organisational innovation

‘Organisational innovation’ means the implementation of a new organisational method in the undertaking’s business practices, workplace organisation or external relations. Changes in business practices, workplace organisation or external relations that are based on organisational methods already in use in the undertaking, changes in management strategy, mergers and acquisitions, ceasing to use a process, simple capital replacement or extension, changes resulting purely from changes in factor prices, customisation, regular seasonal and other cyclical changes, trading of new or significantly improved products are not considered innovations.

P

Proposal

A description of the planned research activities, information on who will carry them out, how much they will cost, and how much funding is requested.

Public body

Public body means any legal entity established as such by national law, and international organisations.

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R

R&I

Research and Innovation

S

SME

‘SMEs’ are micro, small and medium-sized enterprises. SMEs are defined in Recommendation 2003/361/EC of 6 May 2003.

T

Thresholds

For a proposal to be considered for funding, the evaluation scores for individual criteria must exceed certain thresholds. There is also an overall threshold for the sum of the scores.

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Annex I: National/regional call specifications and contacts

Complementary to the transnational call specifications for the EMEurope Call 2016. See following pages (countries and regions in alphabetical order).

Please keep in mind that national and regional specifications may still be in development. Therefore, it is strongly recommended to always consult with the contact persons in your country or region.

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National specifications for Austria

Funding organisation	Austrian Research Promotion Agency (FFG)
Programme	Future Mobility: http://www.bmvit.gv.at/en/innovation/mobility/future_mobility.html https://www.ffg.at/mobilitaetderzukunft
Contact person	Andreas Fertin andreas.fertin@ffg.at +43577555031
Indicative national funding amount (incl. EC top up)	2,250,000 EUR
Maximum national funding per awarded project	500,000 EUR
Eligibility requirements (beneficiary institution, cost)	See “Leitfaden für Kooperative F&E Projekte Transnationale Ausschreibungen, Version 2.3“ Only ‘experimental development’ projects (TRL 5-6 or higher) are eligible
Pre-proposal check	Recommended.
Submission of the proposal at the national level	**Austrian partners** have to register via the **FFG eCall**: http://ecall.ffg.at/ The national call closes on **6 February 2017, 17:00 CET**
Submission of financial and progress reports at the national level	National financial and progress reporting: • Interim report(s); • Final report.
Information and documents available at	https://www.ffg.at/electricmobilityeurope • Guidelines: “Leitfaden für Kooperative F&E Projekte Transnationale Ausschreibungen, Version 2.3”; • Cost guidelines, Version 2.0; Kostenleitfaden, Version 2.0; • “Projektskizze”-form for voluntary pre-proposal check.

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National specifications for Belarus

Funding organisation	National Academy of Sciences of Belarus (NASB)
Programme	Mechanics, Diagnostics and Metallurgy
Contact person	Natallia Yankevich lab_12@tut.by
Indicative national funding amount (incl. EC top up)	1,500,000 EUR
Maximum national funding per awarded project	750,000 EUR
Eligibility requirements (beneficiary institution, cost)	Participation in research works, supported by National Academy of Sciences of Belarus
Pre-proposal check	Recommended
Submission of the proposal at the national level	In the frames of scientific programmes under the management of the National Academy of Sciences of Belarus
Submission of financial and progress reports at the national level	Annual, in the frames of scientific programmes under the management of the National Academy of Sciences of Belarus
Information and documents available at	http://nasb.gov.by/eng/activities/research

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Regional specifications for Catalonia

Funding organisation	Agencia per a la Competitivitat de la Empresa (ACCIÓ)
Programme	[NUCLIS DE RECERCA INDUSTRIAL I DESENVOLUPAMENT EXPERIMENTAL INTERNACIONALS. New name will follow]
Contact person	Lluis M. Tortras ltortras@gencat.cat +34695357070
Indicative regional funding amount (incl. EC top up)	500,000 EUR
Maximum regional funding per awarded project	200,000 EUR
Eligibility requirements (beneficiary institution, cost)	The beneficiaries must be companies with at least one year of life. Projects must have minimum eligible costs of 150,000 EUR. None of the partners can concentrate more than 70% of the project budget. The project can't be started before the filing of the submission. The Catalan part of the project should be carried out in Catalonia
Pre-proposal check	Recommended
Submission of the proposal at the national level	Not decided
Submission of financial and progress reports at the national level	Not decided
Information and documents available at	http://accio.gencat.cat/cat/ajuts-financament

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National specifications for Denmark

Funding organisation	Innovation Fund Denmark (IFD)
Programme	Grand Solutions – Transport
Contact person	Klaus Rosenfeldt Jakobsen klaus.jakobsen@innofond.dk +4561905065 www.innovationsfonden.dk
Indicative national funding amount (incl. EC top up)	2,250,000 EUR
Maximum national funding per awarded project	500,000 EUR
Eligibility requirements (beneficiary institution, cost)	Guidelines Grand Solutions – International projects – Innovation Fund Denmark's rules for budgeting, grants etc. relating to transnational calls, February 2015 http://innovationsfonden.dk/sites/default/files/download/2015/02/11/-6.udgaveGuidelinesTransnationalcalls.pdf
Pre-proposal check	Recommended
Submission of the proposal at the national level	Yes, separate call on www.e-grant.dk
Submission of financial and progress reports at the national level	Yes, scientific and financial reporting carried out on a annual basis www.e-grant.dk
Information and documents available at	http://innovationsfonden.dk/en

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National specifications for Finland

Funding organisation	The Finnish Funding Agency for Innovation (TEKES)
Programme	Witty City, http://www.tekes.fi/en/programmes-and-services/tekes-programmes/witty-city/
Contact person	Martti Korkiakoski martti.korkiakoski@tekes.fi +358295055875 www.tekes.fi
Indicative national funding amount (incl. EC top up)	3,000,000 EUR
Maximum national funding per awarded project	Tekes grant 50%, Tekes loan 70%
Eligibility requirements (beneficiary institution, cost)	**Eligible for Finnish applicants**: applied research and development for new business Preferred applicants: SMEs
Pre-proposal check	Recommended
Submission of the proposal at the national level	No
Submission of financial and progress reports at the national level	National progress and financial reporting: interim and final reports
Information and documents available at	http://www.tekes.fi/en/funding

This project has received funding from the European Union's Horizon 2020 Programme for research, technological development and demonstration under grant agreement no. 723977

National specifications for Germany

Funding organisation	Bundesministerium für Verkehr, Innovation und Technologie (BMVI)
Programme	Elektromobilität/Förderrichtlinie Elektromobilität vom 09.06.2015
Contact person	Erich Kielhorn, Projektträger Jülich, ESN6 ptj-esn6-eranet@fz-juelich.de +4930201993388
Indicative national funding amount (incl. EC top up)	2,250,000 EUR
Maximum national funding per awarded project	500,000 EUR
Eligibility requirements (beneficiary institution, cost)	Förderrichtlinie Elektromobilität vom 09.06.2015 http://www.bmvi.de/SharedDocs/DE/Artikel/G/foerderrichtlinie-elektromobilitaet.html?nn=160668
Pre-proposal check	Recommended
Submission of the proposal at the national level	No
Submission of financial and progress reports at the national level	Yes
Information and documents available at	http://www.bmvi.de/DE *http://www.bmvi.de/SharedDocs/DE/Artikel/G/foerderrichtlinie-elektromobilitaet.html?nn=160668*

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National specifications for Hungary

Funding organisation	Ministry for National Economy (MNE)
Programme	EM Europe
Contact person	Bence Huba
Indicative national funding amount (incl. EC top up)	1.500.000 EUR
Maximum national funding per awarded project	no limitation
Eligibility requirements (beneficiary institution, cost)	no limitation
Pre-proposal check	By the MNE
Submission of the proposal at the national level	to MNE
Submission of financial and progress reports at the national level	to MNE
Information and documents available at	kormany.hu (will be available soon)

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National specifications for Israel

Funding organisation	Israel Europe R&D Directorate (ISERD)
Programme	Office of The Chief Scientist (OCS) R&D Fund The OCS R&D Fund is the Chief Scientist's key facilitation programme to help companies develop processes of converting theoretic knowledge into a functional product The R&D fund programme is supporting R&D projects involving Israeli industrial participant for a total of around 200M € per year, around 16% of which is dedicated to transnational cooperative projects
Contact person	Nili Mandelblit ISERD
Indicative national funding amount (incl. EC top up)	500,000 EUR
Maximum national funding per awarded project	N.A.
Eligibility requirements (beneficiary institution, cost)	Only industrial partners are eligible for funding. The support is in the form of a grant amounting to 50% of the total approved R&D budget.
Pre-proposal check	Mandatory
Submission of the proposal at the national level	Israeli participants will be required to submit a project proposal to the R&D fund and will be funded based on the national rules. More details are available from the website http://www.economy.gov.il/English/RnD/Pages/RnD.aspx
Submission of financial and progress reports at the national level	Submission to the OCS R&D Fund
Information and documents available at	http://www.iserd.org.il

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National specifications for the Netherlands

Funding organisation	STICHTING VOOR DE TECHNISCHE WETENSCHAPPEN (STW)
Programme	Transnational Call on Electric Mobility
Contact person	Paul Schuddeboom E-mail: p.schuddeboom@stw.nl Tel: +3130 6001269 Xavier Weenink E-mail: x.weenink@stw.nl Tel: +3130 6001242
Indicative national funding amount (incl. EC top up)	IenM: 1,000,000 EUR STW: 1,000,000 EUR EC top up: 980,000 EUR Total: 2,980,000 EUR
Maximum national funding per awarded project	500,000 EUR
Eligibility requirements (beneficiary institution, cost)	• STW funding rules distinguish between the following categories of applicants with different funding schemes: ○ Dutch universities or selected Dutch institutes under the standard NWO Physical Sciences rules, as defined in the NWO Regulation on Granting; ○ TO2 institutes, colleges (HBO-instellingen), foundations and companies. • Detailed information on the funding rules and schemes for both categories of applicants can be found on: www.stw.nl/era-net-emeurope • A Dutch representation in a proposal consortium must ○ consist of at least one organisation from both categories of applicants; ○ include a postdoc, or equivalent, position to ensure a sufficient level of scientific quality of the Dutch contribution to a proposal. • Dutch applicants of the first category of applicants must arrange their co-funding from direct government funding and hence for the necessary infrastructure and the supervision of a postdoc. • The requested funding of Dutch applicants of the second category of applicants may not exceed 50% of their costs. The remaining 50% must be covered in cash and/ or in-kind. • STW funds project specific costs concerning: ○ staff (personnel); ○ materials (consumables, small instruments and aids, and travel expenses); ○ equipment (durable scientific equipment in respect of which economic value is depreciated).
Pre-proposal check	Mandatory

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Submission of the proposal at the national level	After granting, Dutch applicants also need to submit the proposal into the STW electronic grant application system ISAAC. Further information about the procedure will be provided after granting. Please check the STW funding page for more information: www.stw.nl/era-net-emeurope
Submission of financial and progress reports at the national level	Submission of financial and scientific reports at national level is required in accordance with the General Conditions of STW.
Information and documents available at	www.stw.nl/era-net-emeurope
Other definitions	An important precondition is active participation and involvement of the industry. The programme generates knowledge that contributes to the objectives of the Automotive Roadmap in the Topsector HTSM.

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Regional specifications for Piedmont

Funding organisation	Finpiemonte S.p.A.
Program/Call	*ERDF Operational Programme 2014/2020- EMEurope Call 2016*
National/regional contact person	Enrica La Martina 011.5717711 electromobility@finpiemonte.it enrica.lamartina@finpiemonte.it
Funding commitment (€)	1.500.000,00 EUR
Anticipated number of projects with Piedmont partners for the call	3 -4 projects
Maximum funding per awarded project	500.000,00 EUR
Eligibility requirements (beneficiary institution, cost)	Beneficiaries: SME, Large company Eligible projects: Industrial research and experimental development. Focus on projects with activities direct to demonstrate in relevant or operational environment and to a system complete and qualified, activities of validation and testing included. (approximately TRL 6-8) Eligible Costs: - personnel costs; - costs of instruments; - costs of contractual research; - additional overheads and other operating expenses. Minimum required investment per project: € 300.000,00
Pre-proposal check (mandatory or recommended)	Recommended
Submission of the proposal at the national level	http://www.sistemapiemonte.it/cms/privati/attivita-economico-produttive/servizi/412-gestionale-finanziamenti National ecall closes on 13 February 2017
Submission of financial and progress reports at the national level	National financial and progress reporting: - One Interim report; - Final report.
Information and documents available at	www.finpiemonte.it

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National specifications for Poland

Funding organisation	National Centre for Research and Development (NCBR)
Programme	INNOMOTO
Contact person	Jakub Murawski jakub.murawski@ncbr.gov.pl +48223907171 +48519683989
Indicative national funding amount (incl. EC top up)	1,000,000 EUR
Maximum national funding per awarded project	600,000 EUR
Eligibility requirements (beneficiary institution, cost)	Eligible project type: industrial research and experimental development Type of organisations eligible for funding: universities, research entities, SMEs, industry
Pre-proposal check	Recommended
Submission of the proposal at the national level	Polish participants will have to submit national proposal after publication of final ranking list
Submission of financial and progress reports at the national level	National financial and progress reporting: • requests of payment; • yearly reports; • final report; • ex-post report.
Information and documents available at	Additional information and templates of document will be available at http://www.ncbir.gov.pl/programy-miedzynarodowe/era-net-co-fund

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National specifications for Spain

Funding organisation	Centro para el Desarrollo Tecnologico Industrial (CDTI)
Programme	R+D+I Internationalisation Programme
Contact person	Raul Garcia raul.garcia@cdti.es
Indicative national funding amount (incl. EC top up)	1,000,000 EUR
Maximum national funding per awarded project	1,000,000 EUR
Eligibility requirements (beneficiary institution, cost)	The entities eligible for CDTI's funding are companies established and carrying out R&D activities in Spain. Universities and Research Institutions can participate as subcontractors of Spanish companies. • Spanish applicants have to submit a formal application through CDTI proposals submission system (http://www.cdti.es/) with the information related with their participation for the National Eligibility check; • Eligible expenditure in R&D projects: Personnel, Instrument and Material, Contractual research, Technical knowledge and Patents consulting and equivalent services intended exclusively for the research activity. Other operating expenses derived from the research project; • Length of the project: The length of these projects may be from 12 to 36 months; • Project budget: The minimum fundable budget is around 175,000 EUR; • Specific financial conditions could be required according to CDTI funding rules. For more information on the applicable funding rules please see: www.cdti.es
Pre-proposal check	Mandatory
Submission of the proposal at the national level	Yes
Submission of financial and progress reports at the national level	Yes, annually
Information and documents available at	WWW.CDTI.ES

This project has received funding from the European Union's Horizon 2020 Programme for research, technological development and demonstration under grant agreement no. 723977

National specifications for Sweden

Funding organisation	The Swedish Energy Agency (SWEA)
Programme	National Energy Research and Innovation Programme
Contact person	Martina Wikström martina.wikstrom@energimyndigheten.se +46 730432097 Stiva Liwiz stiva.liwiz@energimyndigheten.se +46 736602159
Indicative national funding amount (incl. EC top up)	ca. 685,000 EUR (9 million SEK) for the period 2017-2020 including all management costs.
Maximum national funding per awarded project	No maximum amount per proposal or partner
Eligibility requirements (beneficiary institution, cost)	The Swedish Energy Agency potentially supports all private and public applicants, namely: Large Enterprises LE; Small and Medium-sized Enterprises; Public Research Institutions; Research Organisations; other types of organisations. Funding of enterprise RTD and other applicants are subject to Swedish legislations Förordning om statligt stöd till forskning och utveckling samt innovation inom energiområdet (SFS2008:761)
Pre-proposal check	Recommended
Submission of the proposal at the national level	National application forms are required in the full proposal phase. Further information can be obtained from the website or national contact points. http://www.energimyndigheten.se/Forskning/Sok-stod-for-forskning-och-teknikutveckling
Submission of financial and progress reports at the national level	One financial and project report are required annually, following the plan in the national project decision
Information and documents available at	http://www.energimyndigheten.se/Forskning/Sok-stod-for-forskning-och-teknikutveckling www.swedishenergyagency.se

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National Specifications for Turkey

Funding organisation	The Scientific and Technological Research Council of Turkey (TUBITAK)
Programme	1509-International Industrial R&D Projects Funding Program
Contact person	Alp Eren Yurtseven alp.yurtseven@tubitak.gov.tr
Indicative national funding amount (incl. EC top up)	1,500,000 EUR
Maximum national funding per awarded project	There is no maximum amount per proposal or partner
Eligibility requirements (beneficiary institution, cost)	1. Equity companies in Turkey are eligible to apply for this Program. Universities and research organizations may participate as sub-contractor. 2. Industrial research and experimental development phase of R&D is funded and the following sub-phases of these activities are eligible: • Conceptual development; • Technological/technical and economic feasibility studies; • Laboratory studies to be conducted in the process of transition from conceptual development to design; • Design and development; • Prototype production; • Establishment of pilot plant; • Test run. 3. 60% of costs (75% for SME's) deemed eligible after financial and technical inspection is compensated. 4. Eligible cost items: • Personnel; • Travel; • Equipment/software; • Consultancy and services; • Extramural R&D services from domestic research organizations; • Materials.
Pre-proposal check	Recommended
Submission of the proposal at the national level	Proposals should be submitted using the online application tool PRODIS (https://eteydeb.tubitak.gov.tr)

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Submission of financial and progress reports at the national level	Semi-annual reporting (financial and technical) is required
Information and documents available at	http://www.teydeb.tubitak.gov.tr

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Annex II: Updates compared to initial GfA version (21 October 2016)

Most recent adjustments in comparison with previous updated GfA version (16 January 2016) indicated in red.

Page 12, sentence deleted:

"Applicants for this key area have to ensure that their proposal complements and not duplicates any current or planned ALICE calls (http://www.etp-logistics.eu).

Page 5, sentence deleted:

"Academia can be involved for related tasks but does not represent the main target group for funding."

Page 34:

Some adjustments to the text of chapter '8. Further information and help'.

Page 40, sentence added:

"Please keep in mind that national and regional specifications may still be in development. Therefore, it is strongly recommended to always consult with the contact persons in your country or region."

Page 49-50:

New updated 'National specifications for the Netherlands' in Annex I.

Page 34, text added to chapter '8. Further information and help':

"Brokerage tool – matchmaking

Applicants may use the ETNA 2020 brokerage tool for matchmaking: http://www.transport-ncps.net/partner-search. Applicants can leave their organisation profile, project ideas and interests and search for those of other applicants."

Page 42:

In the 'National specifications for Belarus' in Annex I the maximum national funding per awarded project has been increased to 750,000 EUR.

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