



e-MOTICON

e-MObility Transnational strategy for
an Interoperable COmmunity and
Networking in the Alpine Space.

Training «The Role of PAs »



THE ROLE OF PUBLIC AUTHORITIES IN CHARGING INFRASTRUCTURE DEVELOPMENT ...which hat to wear?



THE CONTEXT

In the last ten years, e-mobility experienced an extremely important growth, passing from a “niche” solution, to an actual alternative for drivers and a promising industrial opportunity.

Despite that, analysing the current situation in the Alpine Space it is possible to observe that the overall “framework” is still inadequate to allow a rapid and remarkable diffusion of electric vehicles in the short period.





AN IMPORTANT ISSUE

Big variety of roles played by Public Authorities

A first criticism comes out when considering the role and the interactions of private operators and public bodies in the development of the charging network. To start, within the 5 countries of the Alpine Space, **different administrative organs exist**, with different **powers and responsibilities**:

- Austria
 - 9 Regions/ Länder
 - 79 Political Districts
 - Around 2.100 Municipalities
- France
 - 18 Regions
 - 101 Departments
 - Around 36.500 Municipalities
- Germany
 - 16 Regions/Länder
 - 401 Rural and Urban Districts
 - Around 12.000 Municipalities
- Italy
 - 20 Regions
 - Around 8.000 Municipalities
- Slovenia
 - Around 210 Municipalities





AN IMPORTANT ISSUE

To have different administrative divisions with different competences immediately creates some **complexity** in developing common strategies and a consistent network. Today, in the Alpine Space, **Public Authorities play many different roles** with regards to charging infrastructure deployment.

Besides the fact of having different rules and different levels of infrastructure deployment in different areas, the complete **lack of common strategy and coordination** on the role of PAs could also bring to **critical (and opposite) situations**:

- Very strong commitment and public intervention by the PA, with the **risk to distort the market** and to hinder private operators and new actors entrepreneurship;
- Presence of **completely unequipped areas**, due to low public commitment/money availability and low economic appeal for private e-CS operators.





AND PLEASE REMIND THAT...

The intervention of public bodies in the deployment of the charging infrastructure must respect the general concept stated by the Alternative Fuels Infrastructure Directive (2014/94/EU):

*“The establishment and operation of recharging points for electric vehicles should be developed as a **competitive market with open access to all parties interested** in rolling-out or operating recharging infrastructures.”*





E-MOTICON “TRANSNATIONAL” SUGGESTION

In order to guarantee a coherent environment for e-mobility diffusion and to limit the presence of different rules and different levels of infrastructure deployment in different areas, all the Regional Authorities and Municipalities should act, at least, in order to **facilitate and coordinate** the deployment of a homogenous and effective infrastructure inside their territories and with a strong attention also to neighbouring areas.

e-MOTICON partners agree on the importance that all the involved PAs act homogeneously, at least on a minimum number of aspects and topics.





REGIONAL PAs should, at least:

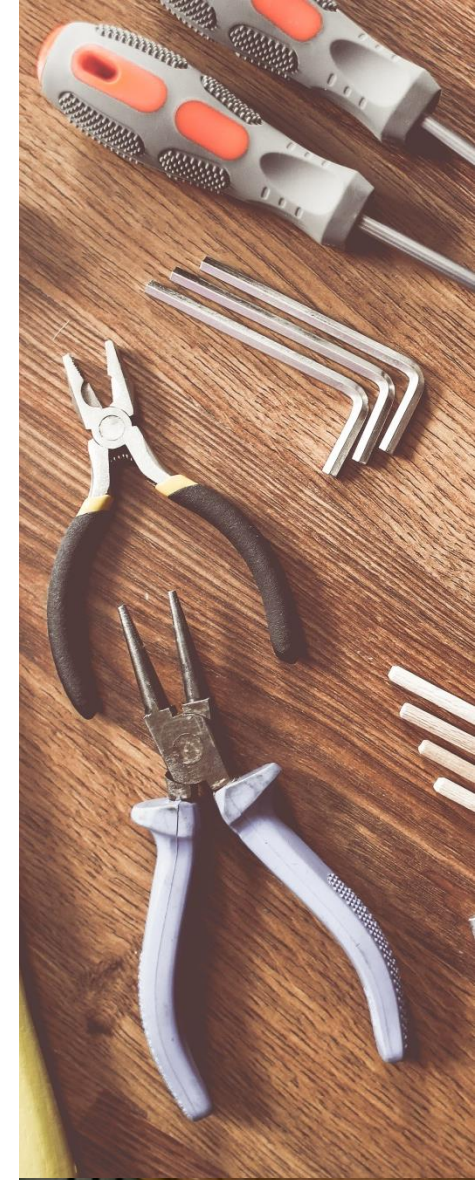




1- Set minimum technical rules on infrastructure deployment

Why?

Despite the presence of some international and national rules on charging infrastructure development, many aspects are still “uncovered” and the rules themselves can be open to different interpretations. Without a set of clear rules or boundaries set up by a regulator, e-mobility service providers can therefore adopt many different solutions while developing the charging infrastructure. This could lead to a fragmented infrastructure composed by many small networks with different characteristics in terms of: charging power (time needed to charge the vehicle), accessibility, identification and billing systems, connectivity, availability of additional services. The absence of minimum common rules could create hurdles to EV drivers, which can't properly plan their trips and the related charging events.

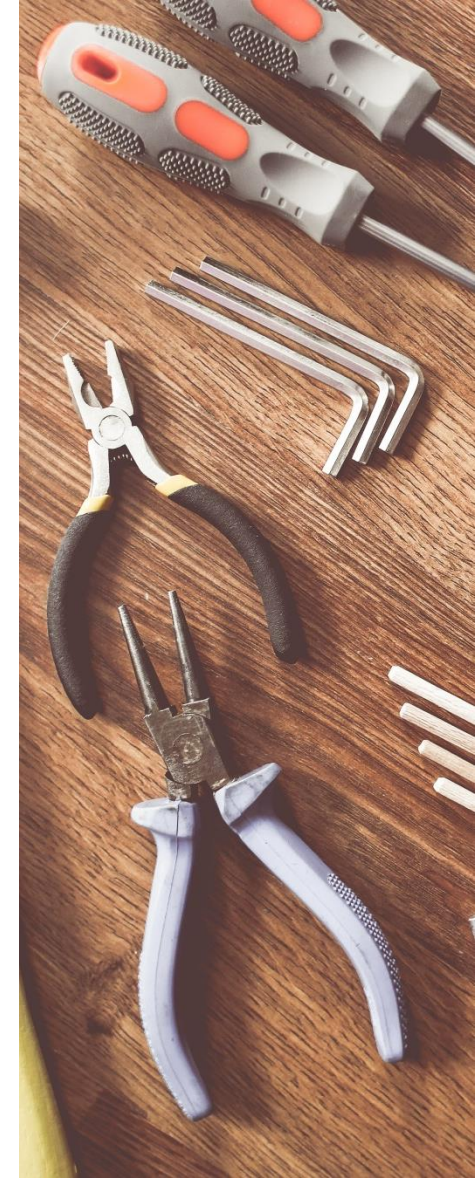




1- Set minimum technical rules on infrastructure deployment

How?

Regional bodies should identify a set of technical rules according to the most effective technological solutions, the international regulation and the local characteristics and should transpose them into a “Guideline” document or directly into a “Territorial Law”, to be used as a reference by the operators. e-MOTICON partners strongly suggest that each Regional PA in the Alpine Space adopt and transpose in their area the technical rules presented in the following section “set supra-regional common minimum rules on infrastructure access”.





2- Set infrastructure requirements for new buildings and new fuel stations

Why?

In the vision of a remarkable e-mobility diffusion in the next years, new buildings and new fuel stations should be equipped from now on to answer to next-future charging needs. The additional cost related to these interventions could detain the building contractor from realizing the charging facilities that should be therefore required by law.

How?

Regional bodies should analyse the potential diffusion of e-mobility in their territory and the traffic fluxes from/to neighbouring areas and identify a coherent percentage of needed charging points in new buildings and new fuel stations. While imposing the percentage, also a specific attention to technical requirements has to be paid, following the rules set according to the previous section.





3- Funnel economic resources (European, National, Regional) to “market failure areas”

Why?

As stated by AFI Directive, the charging infrastructure should be developed as a competitive market, leaving to private operators the opportunity to invest on its deployment and management. On the other side, it is also a shared vision that EV charging stations are a key enabler to e-mobility diffusion and could be seen as a “public service” provided to citizens. In the middle of these two visions, the actual situation shows that private operators are investing in the infrastructure, but only in some specific areas, considered most profitable both by an economic or a “green image” point of view (e.g. metropolitan areas). It is a duty of Public Authorities to stimulate the installation of charging points also in areas that are neglected by private operators, but that are relevant in order to ensure driveability in the whole regional area. The possibility to travel easily on the whole territory is indeed a crucial motivational aspect for new potential EV users.





3- Funnel economic resources (European, National, Regional) to “market failure areas”

How?

Regional PAs can quite often rely on funding coming from European or National plans. PAs should choose to use these resources favouring (in public tenders) projects focused on still neglected and “market failure” areas, in order to guarantee a full coverage of the territory. The presence of the co-financing should smooth out the economic disadvantage for the involved service provider.





4- Organize information and education programmes and coordinate the actions of different stakeholders and operators in the regional territory.

Why?

E-mobility is nowadays a multi-dimensional topic and only a small part of it is related to technical aspects. A huge importance has instead to be given to education, social aspects and governance. To increase final users trust in this new technology, education and formation activities have to be carried out. At the same time, education is also needed by smaller public entities (e.g. small municipalities) that have to set up a fruitful framework to foster the charging infrastructure deployment, in strong correlation with operators and other PAs. Last but not least, the interest in e-mobility could come from many different actors (e.g. tourist centres, Taxis, Local Public Transport companies, airports and multimodal hubs managers, commercial operators,...) and it is a duty of Regional PA to maintain a systemic view and to promote synergies among all the involved stakeholders.





4- Organize information and education programmes and coordinate the actions of different stakeholders and operators in the regional territory.

How?

Regional PAs should organize educational events both public and specifically reserved. They should present themselves as a “connection hub” for many different stakeholders and as facilitators and catalysts of e-mobility activities within the regional boundaries. In order to support PAs in this complex task, e-MOTICON proposes the specific tools and solutions developed in the e-Hub pilot, presented in deliverable D.T3.2.1 [available at <https://www.alpine-space.eu/projects/e-moticon/en/work-packages/deliverables>].

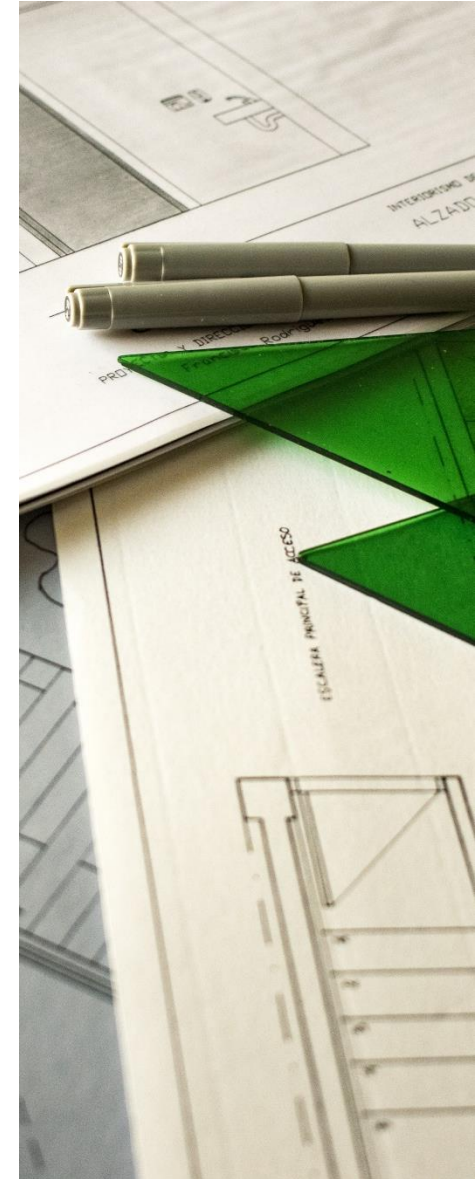




5 - Coordinate the different planning activities within the Regional/Territorial Public Authority, creating synergy among territorial planning, urban planning, traffic planning, environmental planning and more.

Why?

As stated before, e-mobility is nowadays a multi-dimensional topic, which can find multiple expressions in the regional framework. It can affect traffic management and urban planning, but also air quality and environmental planning, as well as economic development, education and new jobs creation. Within the internal structure of Regional PAs, these topics are commonly addressed by different divisions (e.g. Environment, Infrastructure, Mobility, Economic Development, ...) that are in charge of their own planning activities. The lack of coordination can create a not-homogeneous environment, with the risk of taking overlapping or contradictory decisions and of missing important synergies.

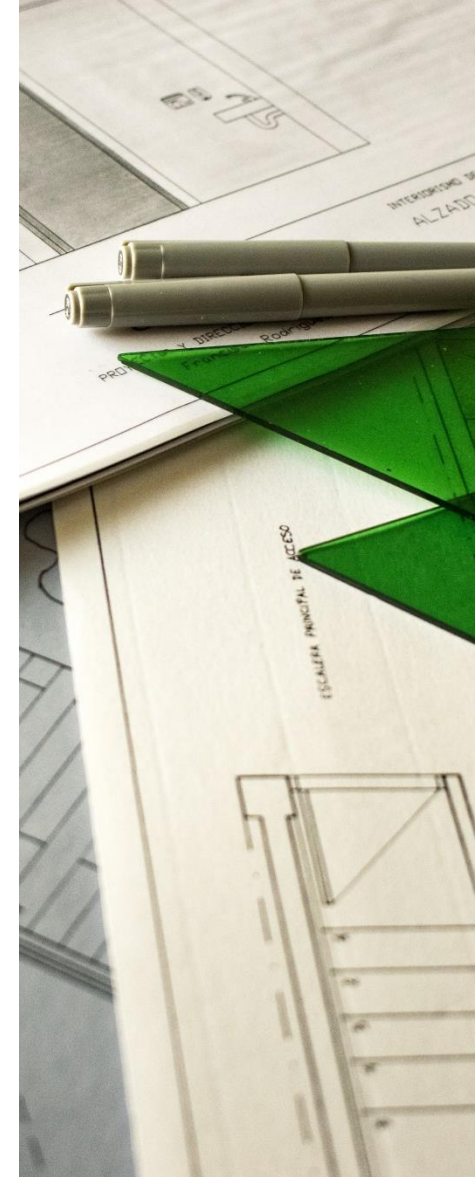




5 - Coordinate the different planning activities within the Regional/Territorial Public Authority, creating synergy among territorial planning, urban planning, traffic planning, environmental planning and more.

How?

Regional PAs should create a dedicated sub-structure devoted to e-mobility, able to monitor the activities of the different divisions and able to detect possible synergies. A constant communication should be pursued and periodic plenary meetings should take place, in order to obtain a systemic and constantly updated view.





MUNICIPALITIES should, at least





1- Act as a stimulus for the infrastructure deployment, without a direct intervention on realization and management.

Why?

The presence of a charging infrastructure within the territory of the municipality is crucial in order to provide the needed services to EV drivers. The PA should act so to create a favourable context and to involve private operators in order to realize a charging infrastructure with public access. As the realization and management costs of the infrastructure is still quite relevant and its planning and design require technical skills, e-MOTICON partners consider generally inefficient the direct involvement of the Municipality as infrastructure owner or as e-mobility service provider. Exceptions can exist, as in the case of the very first stages of the network development (where municipality could be the only actor to invest on it) or in the case of public funding legally reserved only to public bodies.





1- Act as a stimulus for the infrastructure deployment, without a direct intervention on realization and management.

How?

Municipalities should perform preliminary studies on e-mobility demand in their area, including the identification of key points which could be optimal to serve a high number of EV drivers. They should then involve potentially interested service providers which could develop the infrastructure at their own expenses but with the benefit of PA agreement and coordination. When being directly involved as network owners (see the exceptions before), municipalities should carefully identify a private operator that would take the role of e-mobility service provider for the public infrastructure.





2- Facilitate the installation of charging stations both in public and private areas (permissions, public-ground usage regulation, technical support).

Why?

In many cases, the authorization process for charging stations installation could be critic. It could involve, indeed, authorization for the use of public areas, for the installation of electric equipment, for construction work and more. This could create hurdles and blocks to private operators installation plans, as involves additional costs and additional time for the infrastructure set-up. Also technical aspects, as grid connection, energy measuring and correct billing can need a complex interaction among operators, DSOs and public bodies (especially if the municipality is the owner of the infrastructure).





2- Facilitate the installation of charging stations both in public and private areas (permissions, public-ground usage regulation, technical support).

How?

Perform an analysis to identify the most important problems that investors and operators are facing during the installation process. If needed, simplify the administrative procedures, identifying special rules and requirements for the charging infrastructure. It has to be considered, for example, that the charging infrastructure serves as a “public service” and the use of public ground should therefore be privileged with respect to other potential uses. Moreover, technical offices within the public body should be well prepared to answer to service providers questions and should give easy and exact references to the “in force” regulation.





3- Include e-mobility and infrastructure development in the planning activities, leveraging on Sustainable Urban Mobility Planning instruments.

Why?

The European Commission, starting from the Action Plan on Urban Mobility (2009) and the Transport White Paper (2011), is widely promoting the adoption of Sustainable Urban Mobility Plans, which aim to represent a new planning concept able to address transport-related challenges and problems of urban areas in a more sustainable and integrative way. In contrast to traditional transport planning approaches, the new concept places particular emphasis on the involvement of citizens and stakeholders, the coordination of policies between sectors (transport, land use, environment, economic development, social policy, health, safety, energy, etc.), between authority levels and between neighbouring authorities. Sustainable urban mobility planning is therefore a challenging and complex task. Planners are asked to manage many requirements, sometimes conflicting, mainly based on the local level but linked to national and international targets on climate and environment. It is crucial that e-mobility and EV charging infrastructure is considered as a relevant aspect in this new planning process, in order to find the best synergies with the overall urban mobility evolution.





3- Include e-mobility and infrastructure development in the planning activities, leveraging on Sustainable Urban Mobility Planning instruments.

How?

Follow National Rules on Sustainable Urban Mobility Planning and consider, in a well-structured and concrete way, also the topic of e-mobility and infrastructure development. Create a cooperative framework among different technicians and offices within the Municipality and promote events including e-mobility as a relevant aspect in urban planning. Take advantage also of international reference documents, as the Guidelines “Developing and Implementing a Sustainable Urban Mobility Plan” proposed by ELTIS, Europe's main observatory on urban mobility (financed by the European Commission).

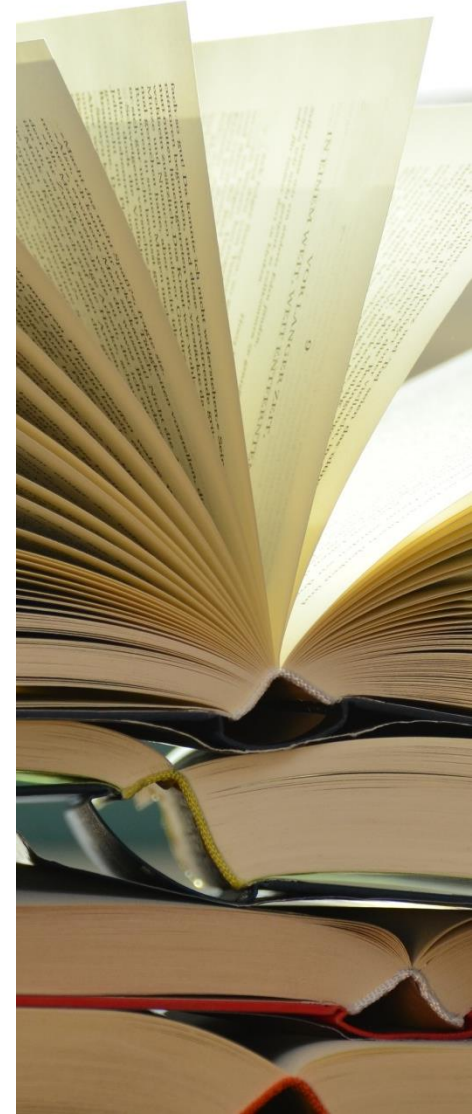




4- Keep constant attention to Regional regulations, guidelines and suggestions and actively answer to the requirements.

Why?

In some countries it is quite common to have a wide production of laws and regulations, both on national and regional level. It is often difficult for Municipalities (especially small ones) to have a constantly updated and complete view of the in-force rules, including laws, regulations, guidelines, plans and more. In this decisive moment for the creation of a homogenous and interoperable charging infrastructure within the Alpine Space, it is fundamental that Municipalities comply at least with the Regional regulations, in order to guarantee continuity and coherence of the service in the whole regional territory. If Regions properly acted, this coherence will also be guaranteed outside the local borders and internationally. Moreover, it is essential that Municipalities quickly comply with the duties imposed by Regional bodies (e.g. the adoption of SUMP or the modification of rules on authorizations procedures).

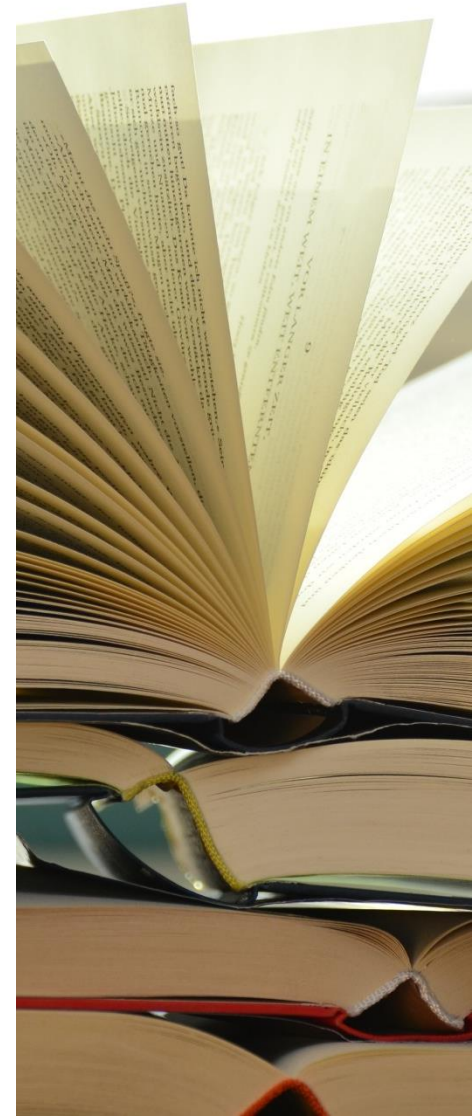




4- Keep constant attention to Regional regulations, guidelines and suggestions and actively answer to the requirements.

How?

It is necessary that both by the side of Municipality and of the Region, an effective communication is created (see the previous section). In order to do that, the instruments proposed by e-HUB pilot could be extremely useful, as well as the clear identification of a devoted structure/office within the Municipality organization.

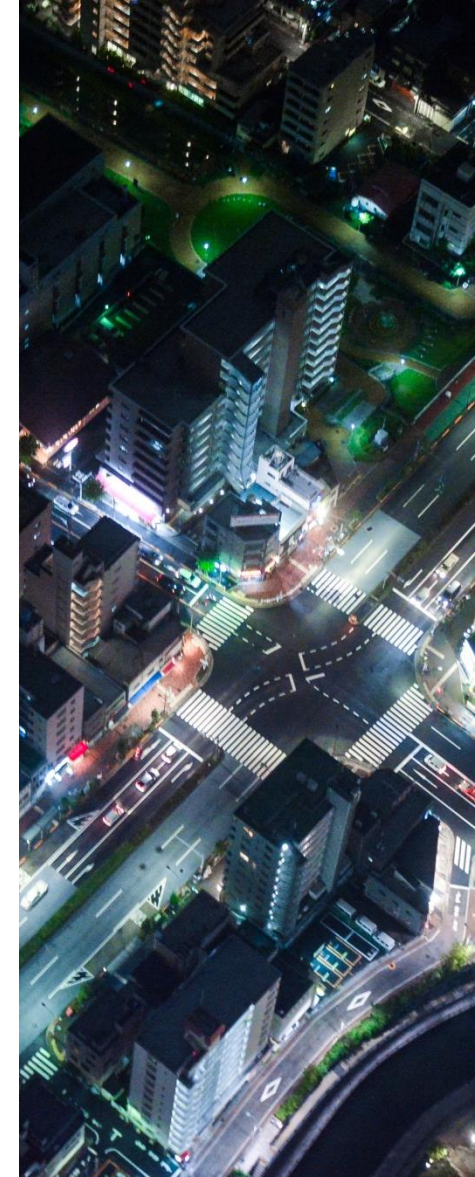




5- Intervene on traffic/parking management and green public procurement to increase EV adoption and generate more profitable conditions for e-mobility service providers.

Why?

The realization of the charging infrastructure actually creates the “offer” of a service. Despite the importance to have the infrastructure already in place, in some AS countries the demand for that service is today quite low. This could easily ingenerate a vicious cycle where the infrastructure deployment doesn’t generate revenues and is therefore blocked. The absence of the infrastructure, on the other hand, limits EVs usability and therefore creates additional obstacles to their diffusion. In this complex “chicken or the egg” situation, Municipalities should try to stimulate the “demand” for charging, creating a urban environment which calls for the adoption of electric vehicles and creates profitable conditions for e-mobility service providers.





5- Intervene on traffic/parking management and green public procurement to increase EV adoption and generate more profitable conditions for e-mobility service providers.

How?

Municipalities can leverage many instruments in order to stimulate EV adoption. The most commonly used are related to traffic and parking management, where EVs could benefit of special permissions or special discounts (including free parking). In addition to that, a good way to create the “demand” is to adopt a “Green Public Procurement” approach and to progressively convert public (and public-related) fleets to e-mobility.





SO, HOW “e-MOTICON” IS YOUR ROLE RIGHT NOW?





Best Practice Examples





GUIDELINES FOR THE DEVELOPMENT OF E-MOBILITY IN THE PROVINCE OF BRESCIA

The Province of Brescia has drawn up an operational document to define the methodology and criteria for a first charging infrastructure of electric vehicles in the Province, according to indications from the Ministry of Infrastructures and Transport in the context of the strategy related to the National Plan infrastructure for the recharge of vehicles powered by electricity (PNIRE).

The document analyses the status quo of e-mobility in the Province and the possible scenarios of e-mobility diffusion from the technical and communication point of view.

http://e-mobility.provincia.brescia.it/it_IT/scarica-documenti/regulations/

#eMobility guidelines

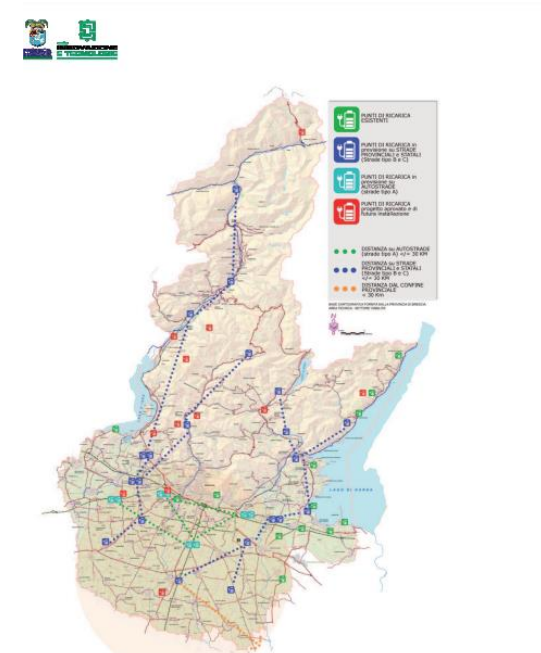


Photo: © Province of Brescia elaboration

Mapa di insieme dell'infrastruttura di ricarica delle reti esistenti, in progetto e della fase intermedia - ricarica in transito

Contact: Sabrina Medaglia

Dott.ssa Sabrina Medaglia – Province of Brescia

smedaglia@provincia.brescia.it

<http://www.provincia.brescia.it>



“RICARICA VALLI BRESCIANE” PROJECT

Regional call for co-funding (PNIRE) for the installation charging infrastructures for electric vehicles in order to face the limited availability of charging stations in the Region.

The Province of Brescia, as lead partner, has planned with 11 partners the installation of a network of charging stations for electric vehicles consisting of:

12 columns: normal power (22kW);

2 columns: high power (50 kW);



Photo: © Pixabay free download

Contact: Sabrina Medaglia

Dott.ssa Sabrina Medaglia – Province of Brescia

smedaglia@provincia.brescia.it

<http://www.provincia.brescia.it>

#charging infrastructure Brescia



UNIQUE COORDINATING AUTHORITY FOR PUBLIC PROCUREMENT

The Province sets-up a Unique Coordinating Authority for public procurement, according to the new procurement Code (Legislative Decree 50/2016) to support local authorities, providing a technical-administrative assistance in different public procurement activities. The development of a Single Central Purchasing Unit will also promote and make more effective the anti-corruption and transparency actions related to tender procedures in order to guarantee the best and correct competition of the business system.

The Unique Coordinating Authority promoted the installation of E-CS in the provincial territory.

<http://cit.provincia.brescia.it/servizi/20-stazione-unica-appaltante/>

#PAsupport



Contact: Sabrina Medaglia

Photo: © Province of Brescia website

Dott.ssa Sabrina Medaglia – Province of Brescia
smedaglia@provincia.brescia.it
<http://www.provincia.brescia.it>



Contact



EUROPEAN REGIONAL DEVELOPMENT FUND

Filippo Colzi – RSE - filippo.colzi@rse-web.it

Project Website: <http://www.alpine-space.eu/projects/e-moticon/en/home>

