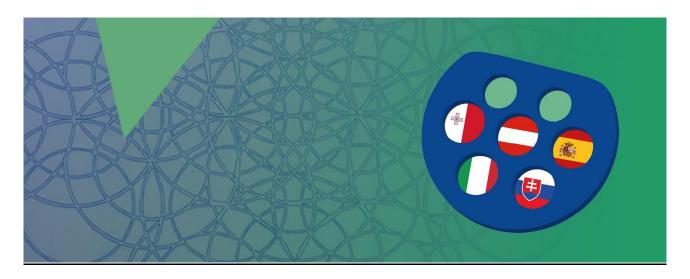




Report on Electro-mobility Preparedness and Needs including draft selection criteria methodology



Milan, December 2017

Gianluca Lentini Chiara Bresciani Alessandro Luè

Poliedra-Politecnico di Milano, Advisory Partner in Prometeus







Contents:

- 1. The rationale behind the report
- 2. SWOT analysis on Electro-mobility preparedness and needs
- 3. Electro-mobility preparedness and needs in each Prometeus region
- 4. The potential for mutual learning and the knowledge exchange process
- 5. The Prometeus paper and poster for TRA 2018
- 6. Next steps in the Prometeus project

1. The rationale behind the report

The Prometeus project has dedicated its Semester 1 to the analysis of the *State of the Art of electro-mobility* in the five partner *Regions: *Malta (MT), Carinthia (AT), Lazio (IT), Prešov (SK)* and *Castile and Leon (ES)*, in order for the partnership to set the action for electro-mobility within their *Regions, and to start working toward the drafting and the implementation of their Action Plans.

The State of the Art of electro-mobility in the Prometeus *Regions was analysed through the preparation, by the Advisory Partner, of two documents: a *Prometeus State of Play and SWOT (Strengths-Weaknesses-Opportunities-Threats) template* and an *Electro-mobility Preparedness and Needs Template* (See <u>Attachments A and B</u> to this report. All documents compiled by the partners are in <u>Attachment C.</u>). Those two documents were first shared with the partners to get to an agreed version, re-drafted by Poliedra and then completed by all partners.

The State of Play's scope was to re-focus on the project partners and their competences, to outline the *Regions they are working in, to clearly define the policy instrument they are aiming to improve, to recall the indicators of results that were declared in the Application Form, and to list the composition and competences of each region's Co-Design Stakeholder Groups. The aim of the SWOT section was to induce a reflection and self-assess Strengths, Weaknesses, Opportunities and Threats concerning electro-mobility in general in each Region. SWOTs were exemplified by some keywords, and each partner was asked to list their own self-assessed Strengths, Weaknesses, Opportunities and Threats in order of perceived importance.

The aim of the template on Electro-mobility preparedness and needs was to focus on two aspects: "what we can do (Preparedness)" and "what we need to do (Needs)". For each of those aspects groups of measures and specific measures were specified, in 5 main categories: for those measures, the partners were asked to indicate whether those specific measures were already implemented and could represent a good practice to be shared (Preparedness), and whether those specific measures were needed and, if so, were to be part of the Regional Action Plan (Needs).







During the kick-off meeting in Malta (March 29th 2017), the Advisory Partner organised a session on the self-assessment of strengths, weaknesses, opportunities and threats for the partners' to start reflecting on the State of the Art of electro-mobility in their *Regions and to get acquainted with the work expected from them in Semester 1. In the following, two pictures documenting the self-assessed SWOT organised by the Advisory Partner at the kick-off Meeting in Malta:



Figure 1: Two snapshots session on the self-assessed SWOT held by the Advisory Partner at the kick-off Meeting in Malta – March 29th 2017, presentation of the activities by Poliedra and first results of the self-assessed SWOT







2. SWOT analysis on Electro-mobility preparedness and needs

The assessment of strengths, weaknesses, opportunities and threats performed by all partners yielded some very interesting results. All *Regions, with the exception of Prešov, already have policy instruments specifically promoting e-mobility and these policies are often accompanied by incentives, and by a rather high degree of awareness among policy makers. With the exception of Prešov, all *Regions have, also, e-fleets available, at various degrees of penetration, and with adequate energy mix. Most *Regions have a strong R&D sector for e-mobility, in particular Castile and León and Prešov.

Weaknesses are mainly represented by high costs for initial investments in development, infrastructure, and purchase of e-vehicles, whereas long times in implementation of measures for e-mobility are an issue for some; a lack of awareness/interest/sensitivity or a self-assessed low capability regarding e-mobility in general is acknowledged throughout the Prometeus partnership, while a communication strategy not specifically targeted towards e-mobility is often indicated as a weak point in all *Regions.

E-mobility inspires the Prometeus *Regions with several opportunities, namely the fulfilment of climate and mitigation targets, most importantly those in the framework of the COP21 and COP23, and the reduction of the dependency on fossil fuels; another often mentioned opportunity is the possibility to create new jobs and develop new skills and, linked to that, the possibility of developing research sectors, new business models, new opportunities for partnerships.

The perceived threats arise from possible lobbying by the fossil fuel business sector, the perception of long times for revenues after the important investments expected with the large-scale implementation of electromobility, and in general the high costs of e-mobility, especially for public administrations subjected to austerity measures and budgetary restrictions.

The main findings of the SWOT analysis performed by each partner are summarised in the following:

- <u>Strenghts</u> (at various degrees in the different *Regions)
 - With the exception of Prešov, all *Regions have policies specifically promoting e-mobility. Those policies are often accompanied by incentives, and by a rather high degree of awareness among policy makers;
 - With the exception of Prešov, all *Regions have e-fleets available, at various degrees of penetration.
 - Most *Regions have a strong R&D sector for e-mobility (AT, ES, IT, SK)
 - Most *Regions have an adequate energy mix for e-fleets.
- Weaknesses (at various degrees in the different *Regions)
 - High costs for initial investments in development, infrastructures, and purchase of evehicles are still a problem for most *Regions.
 - Long times in implementation of measures for e-mobility are a problem for some *Regions.







- Lack of awareness/interest/sensitivity/ or self-assessed low capability regarding e-mobility in general
- Bad communication or lack of communication concerning e-mobility
- Opportunities (at various degrees in the different *Regions)
 - Fulfillment of climate/pollution commitments at *Regional level, contributing to COP21 and other agreements. Decrease of the dependence on fossil fuels.
 - Creation of new jobs from the development of the e-mobility sector. Creation of new business models, partnerships and services.
 - Creation or strengthening of R&D sectors
- Threats (at various degrees in the different *Regions)
 - In most *Regions, high costs of implementation are still also a threat, especially for public administrations and their budgetary restrictions.
 - Lobby from the oil/fossil fuel sector
 - Delayed revenues from the initial important investment in e-mobility is also considered a threat
 - Limited power of decision in e-vehicle manufacturers
 - Range anxiety and related e-mobility anxieties.







3. Electro-mobility preparedness and needs in each Prometeus *Region

The template listed 5 main categories of measures, each divided into specific measures, to describe the level of preparedness and needs of each *Region within the partnership with respect to promotion of electro-mobility. A specific focus was also given to possible good practices to be exchanged and to specific measures that can be part of the Action Plan that each *Region has to draft and implement.

In the following the main findings of the template are listed, first in terms of preparedness ('What we can do') and then in terms of needs ('What we need to do').

The *Regions in which the specific measures are present are indicated by their country code: AT for Carinthia, ES for Castile and Leon, IT for Lazio, MT for Malta, SK for Prešov. As per the 'needs' section, each *Region is presented according to the specific actions they declared in the Application Form towards the improvement of their own policy instrument, and an indication of which Prometeus partner can support those specific actions in the mutual knowledge exchange process is also provided: the aim of the drafting of the electro-mobility preparedness and needs template was in fact not only descriptive and static, but also dynamic, aiming to position each *Region and the drafting of *regional Action Plans in the interregional learning process.

The interregional learning process, supported by the Advisory Partner, involves the project partners and groups of regional stakeholders in all participating countries, that are animated during throughout the life of the project. The different aspects of the interregional learning process include Interregional Workshops (IW), in which good practices are presented by the hosting partner, possibly within Field Visits (FV), Focused Meetings (FM), in which two to three partners meet to discuss specific topics of mutual interest, e.g. a specific regional programme on incentives for e-mobility or a specific communication strategy: those meetings and workshops inspire the Regional Co-Design Stakeholder Workshops (RCSW), the stakeholder meetings that take place at regional level and that have the ultimate scope of supporting the drafting of the Action Plans.

3.1 What we can do - Preparedness

- POLICIES AND REGULATORY MEASURES
 - <u>Guidelines for installation of charging stations</u> are existing in ES, IT, MT. At national level they are being elaborated in AT.
 - Regulations regarding the movement of vehicles (parking places, load/unload reg., movement restrictions) are present in AT and ES. They are planned in IT.
 - <u>Tax reductions</u> are in force in AT, ES, MT, SK, IT.
- INCENTIVES FROM PUBLIC AUTHORITIES FOR THE PURCHASE AND USE OF E-VEHICLES
 - <u>Public Fleets</u> have been set up in AT, SK (some municipalities), MT (ongoing), IT (some areas).







- Award Criteria for e-mobility in public tenders are in place in MT.
- Measures for private fleets are in place in ES, AT (projects), MT.
- Measures for private users (grants, loans) are in place in ES, MT, AT, IT.

RESEARCH AND INNOVATION

- <u>Investments in R&D in e-mobility</u> exists in AT (small projects), ES, MT and SK.
- <u>Joint demonstration projects</u> with other PAs have taken place in MT, ES, AT.

AWARENESS RAISING

- <u>Promotion of Public Fleets</u> have been performed in ES, MT.
- <u>Information campaigns</u> have taken place in AT, ES, MT.
- <u>Educational programmes</u> targeted at children/young people have taken place in ES, AT, MT.
- Training and professional development has taken place in MT and ES.
- <u>E-mobility driving instructions</u> have been developed in MT, AT.
- <u>Information tools</u> have been developed in MT.

3.2 What we need to do (Needs in each *Region):

In the following each *Region is presented in terms of what they need, as per their own declarations in the Application Form of Prometeus, and what other partner *Region might provide, according to their own 'preparedness', in the interregional learning process.

- What Carinthia needs:

- Improvement of the implementation of the Local and regional strategy for power efficiency and sustainable mobility, in terms of:
 - Guidelines for installation of charging stations <- MT, ES, IT
 - Incentive/tax reductions for public fleets, companies and individuals <-MT, ES
 - Awareness raising <- MT, ES
 - Vehicle sharing <- MT, IT

- What Castile and Leon needs:

- Creation of a VEACYL and development of projects fostering R&D and RIS 3, namely:









- Fostering the purchase of e-vehicles <- MT, AT, IT
- Installation of charging points in PA buildings <- MT, AT
- Promotion of public e-fleets <- MT, AT, IT
- Education and information campaigns <- MT, AT
- Public/Private agreements <- MT

- What Lazio needs:

- Improvement of ERDF ROP Axis 4, through:
 - Drafting of tenders and guidelines for e-mobility and multimodality <-AT, MT, ES
 - GPP criteria <- MT
 - IT solutions for restricted traffic areas <- ES?, AT?
 - Improvement of coordination among governance levels <- ES?

- What Malta needs:

- feed the NTS and NES, and help the Ministry for Transport and Infrastructure to understand how to better implement and carry out a modal shift towards e-carsharing and e-carpooling <- AT, ES, IT.

- What Prešov needs:

- Criteria for promotion of e-mobility <- AT, ES, MT, IT
- Integration of e-mobility in local SUMPs <- AT, ES, MT, IT
- Incorporation of e-mobility in the General Plan for Transport at regional level
 AT, ES, MT







4. The potential for mutual learning and the knowledge exchange process

On the basis of the State of Play and SWOT analysis, as well as on the basis of the Template on Electro-mobility Preparedness and Needs, and on the basis of the desired actions to be taken by the different *Regions towards the improvement of their own policy instruments, a structured dialogue is being put in place in Prometeus in order to facilitate mutual learning and exchange of good practices. Such a structured dialogue is characterised by trying and matching the "needs" and the "have got's" of all PROMETEUS regions, and takes place at two scales:

- small-group focused meetings, that specifically focus, e.g., on the exchange of specific strategic
 policy or technical documents, e.g. for the drafting of tenders or the localisation of recharging
 infrastructures;
- partnership-wide dialogue in interregional workshops and steering committees, focusing on the common challenges and steps to be taken by all regions, e.g. the perceptions related to implementation costs of the transition towards electromobility or the most effective way to facilitate the involvement of regional stakeholders.

More in detail, the first small group Focused Meeting between Malta, Carinthia and Lazio and moderated by Poliedra, organised for the semester 2 meeting in Klagenfurt, Austria, on October 3rd 2017, and has focused on the exchange of criteria promoting electromobility infrastructures (Lazio to Carinthia), on the presentation of policy instruments promoting e-fleets (Carinthia to Lazio), on the incentives for the purchase of e-vehicles for low-income households (Lazio to Malta), on the legal instruments for an effective governance coordination in e-mobility (Malta to Lazio), on awareness raising activities on e-mobility (Malta to Carinthia) and on the incentives for the promotion of e-carsharing (Carinthia to Malta).

Partnership-wide dialogue is taking place, on the other hand, in project-wide meetings such as the steering committees and the interregional workshops, in which good practices from one regions are presented to all other, and in which stakeholders of the hosting region address the partnership and stakeholders from all partners.

The creation of the interregional mutual knowledge exchange, and the initial positive experiences in it, is regarded as a highly significant result already obtained by project Prometeus: the drafting and the implementation of the five regional Action Plans, actively intervening in the improvement of the policy instruments indicated by the participating regions, are due for the phase 2 of the project (2019 to 2021) and critically depend on the effective and structured knowledge exchange that is being built in the initial two and a half years.

However, the main discussion held in the Klagenfurt Steering Committee, also following the first experience in the Focused Meeting, led to the agreement that the main future challenges for Prometeus, from today to mid-2021, are at present identified undoubtedly in the need to refine and better focus the structured dialogue that is being built, in particular bearing in mind the need of overcoming linguistic, legislative and cultural barriers, and in furthering a truly effective involvement of groups of







regional stakeholders in the interregional mutual knowledge exchange, in order for them to gather a first-hand impression of the best practices in electromobility being implemented in other regions. The next steps of the project lie, in fact, in the exchange of best practices, aimed to further inspire the regional stakeholder groups (second semester 2017) and in the drafting of the preliminary Action Plans (first semester 2018), a step that will represent the first actual concrete basis for the promotion of emobility within policy instruments. In the following, a picture taken during the first Focused Meeting in Klagenfurt:



Figure 2: animated by Poliedra (Gianluca Lentini), the Focused Meeting held in Klagenfurt saw the participation of host Carinthia (Gerald Miklin), LP Malta (Victor Battistino) and partner Lazio (Roberta Pascolini and Emanuela







The Prometeus paper/poster for Transport Research Arena 2018

Advisory Partner Poliedra has submitted an abstract on the project Prometeus for 2018 Transport Research Arena, the European Research and Technology conference on transport and mobility, that will take place in Vienna on April 16-19 2018. The abstract was accepted, and a subsequent paper was requested. The paper, entitled "The promotion of e-mobility in regional policies: the ongoing Prometeus project and its rationale", authored by Poliedra's Chiara Bresciani, Gianluca Lentini and Alessandro Luè, was eventually accepted for TRA 2018's poster session.

TRA 2018 will represent an opportunity for the Prometeus partnership to present the project and the ongoing interregional learning process towards the drafting and implementation of the Action Plans, and it is expected to feed the interregional learning process thanks to external inputs and good practices coming from outside the partnership.

6. Draft methodology for selection criteria

Semester 2, according to the Application Form, was to be dedicated to the collection of good practices within the partnership. To this end, a template has been circulated on 'Regional Good Practice Collection and Sharing'. The template represents a Prometeus-customisation of the good practice template of the Interreg Europe programme, and that is now superseded. The Prometeuscustomisation goes beyond the first formulation of the Good Practice template and takes into account the Interreg Europe Webinar on Good Practices (October 27th 2017), and the newly available section of the Interreg Europe website: https://www.interregeurope.eu/policylearning/good-practices/, where selected good practices from the Prometeus partnership can be uploaded for the benefit of a wider Interreg Europe Audience.

In terms of selection criteria for the good practices, the first draft of the methodology is included in the template itself: in particular, the sections of the template detailing 'evidence of success and results achieved', 'difficulties encountered/lessons learned' and 'potential for learning and transfer, both within the Prometeus partnership and to the Interreg Europe platform' represent the first possible criteria for the selection of good practices within and among the *Regions.

The first round of good practices collection (2 for each *Region), that is due for February 9th 2018, will allow for the refinement of such selection criteria, and will be attuned with the main theme of Semester 3 (exchange of experiences on good practices on e-mobility): the refinement of such selection criteria will allow for a second round of collection of good practices (further 2 for each *Region) and for the preparation in Semester 3 of a Report on Regional Good Practices Collection and Sharing, also including the benchmarking of good practices against selection criteria.

