

Implementation of the MED EnerNETMob project in Arrábida

Interreg
Mediterranean



EUROPEAN UNION



ENA

AGÊNCIA DE ENERGIA E AMBIENTE
DA ARRÁBIDA

Webinar Electromobility: urban planning impact of technology trends (UTC)
25th November 2020

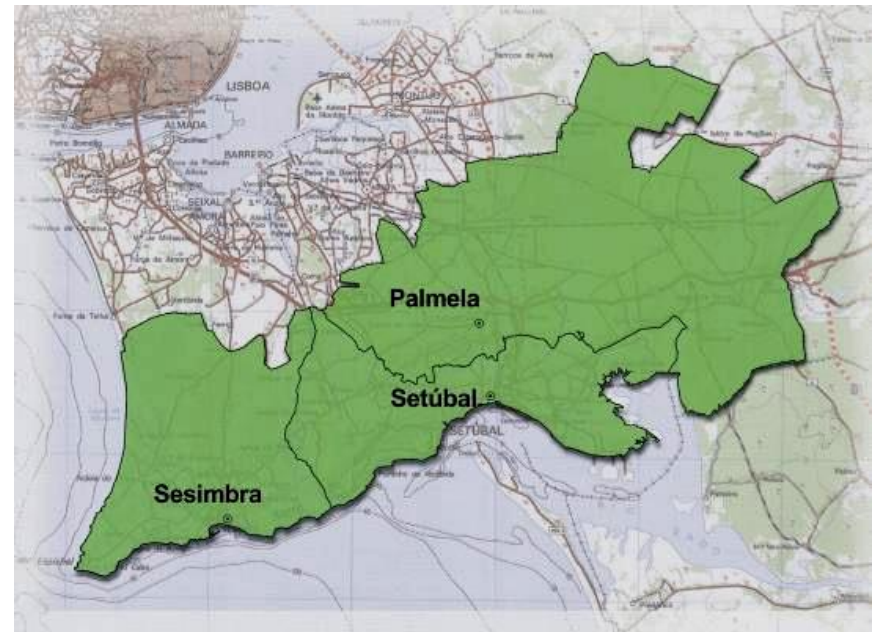
ENA's PRESENTATION

21 associated entities

3 Municipalities

Territory with **890 km²**

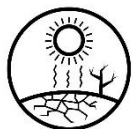
234 000 inhabitants



The region brings together heavy and cutting-edge technology industry, handicraft activities, good quality tourism infrastructures and large natural areas with outstanding characteristics.

The landscape morphology is dominated by plains, with the exception of the mountainous range of Arrábida - highest point at 500 meters above sea level.

ENA's KEY THEMATIC SUBJECTS



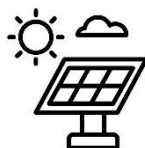
Climate change mitigation and adaptation

Environment, energy and clima in urban planning



Mobility, accessibility, transport

Renewables



Partnership

Energy Efficiency



Awareness raising, training

Financing instruments



ENERNETMOB OVERVIEW



EnerNETMob IN A NUTSHELL

16

Partners



12

Countries



5,74M €

Project Budget



EnerNETMob is a Strategic project of the **Interreg-MED Programme**

3 phases: testing + pilot + capitalization phase

Eventually it will promote **policy recommendations** and holistic **SEMPs** (Sustainable Electromobility Plans) that can be adopted by Member States

Implementation period: **1/2/2018 – 31/1/2022**

PARTNERSHIP



4 Ministries, 5 regional authorities, academia partners, energy agencies, clusters, research centers, communication, advocacy, capitalization experts

EnerNETMob OBJECTIVE

EnerNETMob aims to draft, test and improve parallel “**Sustainable Electromobility Plans**” according to common standards and low carbon policies, in order to establish an **Interregional Electromobility Network**” crossing cities of all the Interreg MED area.

EnerNETMob **develops electromobility solutions** and tests pilot actions **so as to overcome medium-trip limitations** and provide **common technical standards** and common low carbon policies, following the 2014/94/EU Directive.

THREE PILOT TYPES:

PILOT 1

Intermodal road electro mobility networks linking islands and urban areas also at transnational level



Let's not forget inter-modality !

PILOT 2

Public/private services/measures for sharing electromobility solutions, such as electric vehicle sharing, e-car pooling, e-bike and e-car sharing.



PILOT 3

Last mile freight transport connections. Battery Electric Vehicles in 3 cities in collaboration with **SMEs** and **farmer associations** to propose a sustainable business model



ICT PLATFORM

- ❖ To manage and monitor the charging infrastructures and Electric Vehicle services
- ❖ To interconnect local *"Small-Scale Infrastructure Network"* within a transnational *"Inter-regional Electromobility Network"*

Partners will interconnect and integrate the tested "Small-Scale Infrastructure Networks" using **common technical standards** through a shared ICT platform consisting of common **tools** and **protocols** for the charging stations.

EUROPEAN FRAMEWORK-WHERE ARE WE?



POLICY ASSESMENTS

Analysis phase 1

- Assessment of policies and **Regulations/Directives adopted by EU Commission and Parliament** and the benchmarks at EU level
 - Energy
 - SUMPs
 - Air quality

Analysis phase 2

- **National Policy Frameworks in** the 12 countries from the consortium:
 - 2014/94/UE Directive;
 - Covenant of Mayors and SEAPs;
 - National Policy Frameworks according to SUMPs;
 - Local benchmarks and good practices.

CURRENT DEVELOPMENT OF ELECTROMOBILITY IN THE EU

Development of Electric Mobility in the EU

Electric Transport framework

Directive 2014/94/EU: On the deployment of alternative fuels infrastructure

Sustainable Energy framework

Directive 2009/28/EC on the promotion of the use of energy from renewable sources

Sustainable Mobility framework

Com(2013) 913 C
– Concept for SUMP

Air Quality framework

Directives 2008/50/EC and 2015/1480 on ambient air quality and cleaner air for Europe
Directive 2016/2284 on the reduction of national emissions of atmospheric pollutants

Covenant of Mayors

Sustainable Energy Action Plan (SEAP)

LINES OF ACTION

Ongoing work is identifying the following financing strategies

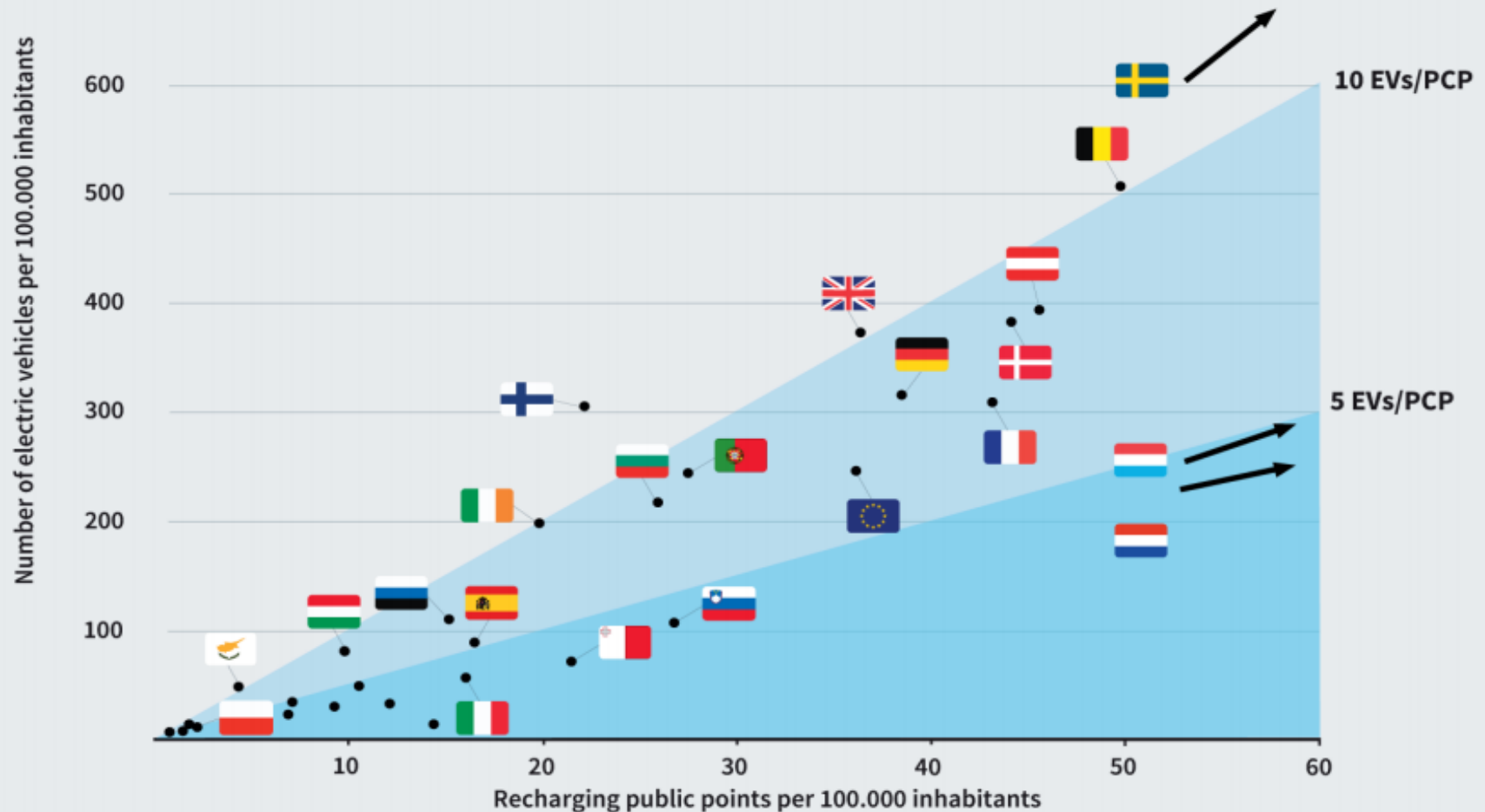
Direct Measures

- Grants for purchasing electric vehicles
- Grants for installing recharging stations
- Purchase of electric vehicles for public transport

Indirect measures (often at a lower administrative level)

- Tax relief
 - Parking free of charge
 - Free use of recharging points
 - Free tolls
 - Exemption of local vehicle tax
 - Entrance allowed in low-emission zones
 - Use of bus lanes
 - HOT lanes
- } Economic incentives
- } Right of use/prioritization

Current number of public chargers and EVs across Europe



Off the charts: Sweden: 79 PCP/100,000 inhabitants and 1043 EVs/100,000 inhab.

Netherlands: 296 PCP/100,000inhab and 996 EVs/100,000 inhab.

Luxembourg: 153 PCP/100,000 inhabitants and 755 EVs/100,000 inhab.

Source: T&E analysis of Plugsurfing, OpenChargemap and EAFO

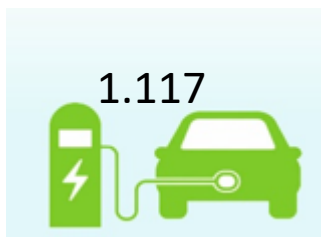
NATIONAL FRAMEWORK



NATIONAL FRAMEWORKS - Portugal

Implemented measures

- **MOBI.E** installs recharging stations
 - 1117 charging points of which 55 fast charging points. 4 fast charging points awaiting certification and 12 in installation process. Problem: fast charging points installed but not connected after several months.
- The Portuguese State finances with **aids**
 - Recharging network infrastructure
 - Electric vehicle purchase
- **Free parking** in some cities
- **Free slow charge** in national network until, at least, end of 2019.



Category	Description
Purchase Subsidies	Portugal - Purchase subsidies National Subsidy for BEV's: 3000€(persons), 2.250€ (companies) and PHEV's: 1.125 €
Registration Tax Benefits	Portugal - Registration tax benefits Tax reduction / exemption - CO2 based tax
Ownership Tax Benefits	Portugal - Ownership tax benefits Tax reduction / exemption - CO2 based tax 20% up to the maximum of € 400,00
Company Tax Benefits	Portugal - Company Tax Benefits: 250€
Local Incentives	Portugal - Local incentives Free parking in several Municipalities (Lisbon) Local energy utility company offers 1 year discount in house electricity rates for BEV buyers
VAT Benefits	Portugal - VAT Benefits Tax reduction / exemption - CO2 based tax

Year	Number of BEV & PHEV sold	Inter-annual growth (%)	Comments
2018	8 241	94,50	Record in annual sales
2017	4 237	115,08	
2016	1 970	50,96	
2015	1 305	260,50	Incentives reintroduced
2014	362	61,61	
2013	224	39,13	
2012	161	-23,33	Incentives withdrawn
2011	210		
Total	16 710		

BENCHMARKING

	Grants to purchase EV	Funding to install charging points	Tax relief	Indirect measures	Aggressive Infrastructure targets	SUMPs	Covenant of Mayors
Albania				✓		✓	✓
Austria	✓	✓	✓	✓		✓	13 cities
Croatia	✓	✓	✓	✓	✓	✓	62 cities
Cyprus				✓	✓	✓	✓
France	6.300 €		✓	✓	✓	✓	80 cities
Greece	✓	✓	✓	✓	✓	✓	138 cities
Italy	✓			✓		✓	3.210 cities
Malta	✓	2.000 – 10.000 €		✓		✓	24 cities
Montenegro				✓		✓	✓
Portugal	2.500 €	✓	✓	✓	✓	✓	113 cities
Slovenia	✓			✓		✓	✓
Spain	5.000 €	✓	✓	✓	✓	✓	1.535 cities

ELECTROMOBILITY IN THE ARRÁBIDA TERRITORY



ARRÁBIDA – STATE OF THE ART

EV charging network

Municipality	EV charging stations	
	Private	Public
Setúbal	9	12
Palmela	5	0
Sesimbra	8	1

No electromobility plans developed

Just one **SUMP** for Setúbal Municipality

2 SEAPs developed

ENA's ACTIVITIES IN ENERNETMOB

- ✓ Sustainable Electric Mobility Plan for the Arrábida Territory
- ✓ Pilot action “Electric freight transport solutions for local logistic chains serving urban areas”
- ✓ Communication and awareness-raising
- ✓ Contribution to the smart cities community
- ✓ Organization of events, workshops
- ✓ Capacity Building of Municipalities and SMEs

ONGOING ACTIVITIES

✓ **Sustainable Electro Mobility Plan for the Arrábida Territory**

- Issues found
 - lack of regulamentation related to:
 - land use
 - procedures to establish network of charging stations
 - taxes
 - citizen charging activities
 - capability of energy network distribution
 - relation with cities development plans

✓ **Pilot-action**

- Purchase of 100% electric vehicle and cargo-bykes
- Purchase of equipment and installation of three fast charging stations
- Development and interoperability of ICT platform for EV charging network

✓ **Communication and capacity building events**

✓ **International Conference on ElectroMobility**

Thank you for your attention



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