Province of Brescia

- 4.786 km², 205 Municipalities, 1,26 ml inhabitants, over 1 ml vehicles

- one of the most industrialized in Europe

- 1° in Italy for renewable energies: 20 Hydroelectric Dams, 230 micro dams; 2.404 GWh from biodegradable waste; 26.555 photovoltaic plants

Numero impianti fotovoltaici: 880.090

Valori espressi in percentuale

Min   Max
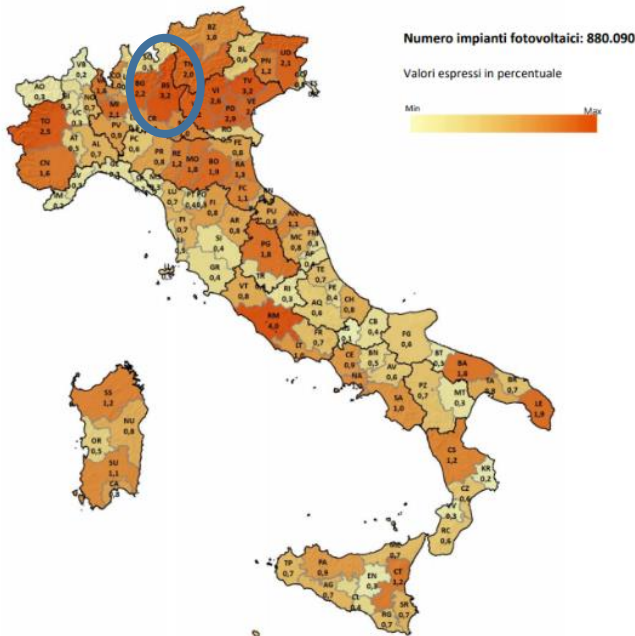
- **How can a Public Administration foster e-MOBILITY?**

  - **Planning & Policies;**
  - **Investments**
  - **Digitalization**
  - **Cooperation/networking with Private sector and Universities**

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Planning & funds

Province of Brescia Plan for the location of e-MOBILITY charging points
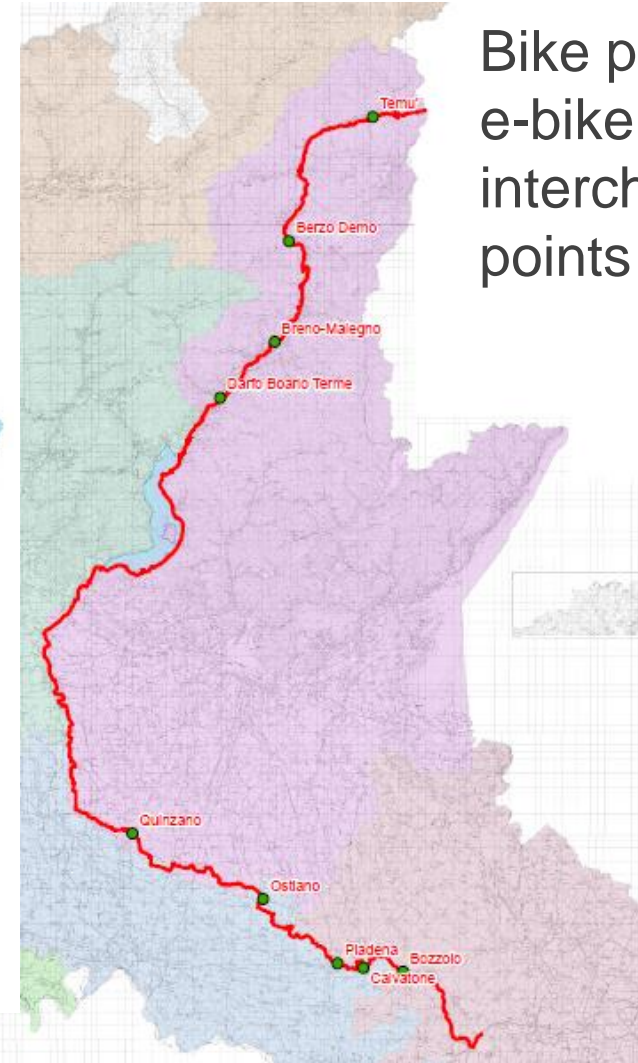
National e Regional funds for e-CS (30) e-vehicles and e-bikes
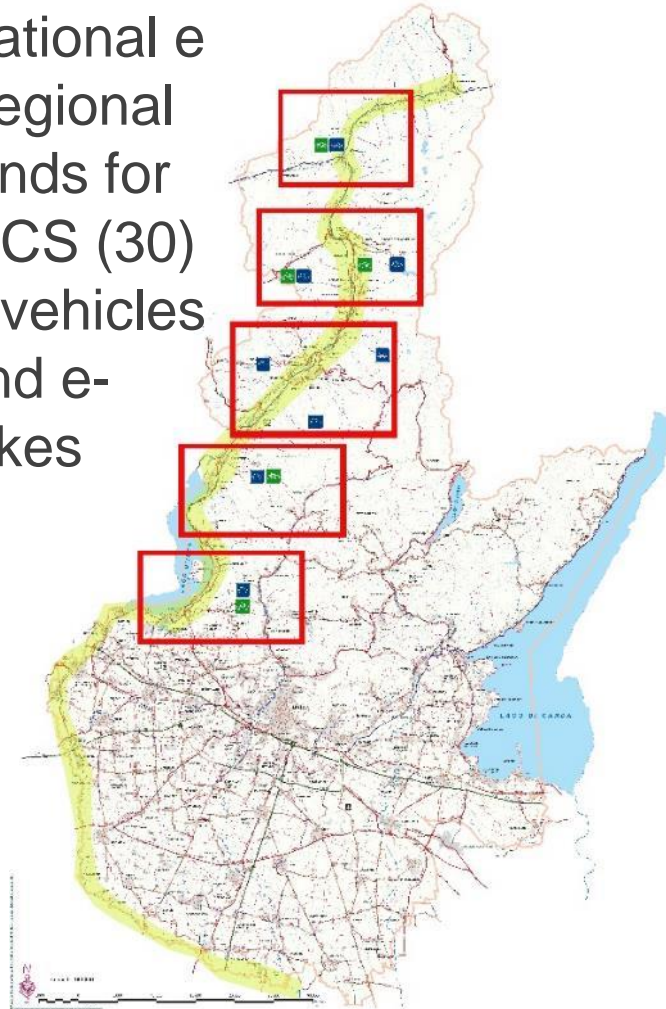
Bike paths for e-bike and interchanges points

Innovation and coperation

Interreg
Alpine Space
E-MOTICON
EUROPEAN UNION
EUROPEAN REGIONAL DEVELOPMENT FUND

The problem

Low and **inhomogeneous** deployment of e-mobility characterizes Alpine Space.
One reason => **low interoperability** of electric charging stations

Project objective

Support Public Administrations in ensuring homogeneous development of e-mobility, enabling **large diffusion of electric charging stations** with a wider **interoperability**

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Partner

http://www.alpine-space.eu/projects/e-moticon/en/home

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Planning instruments

Regional Action Plans

TARGET GROUP:
Regional/Local Public Administration responsible for spatial planning
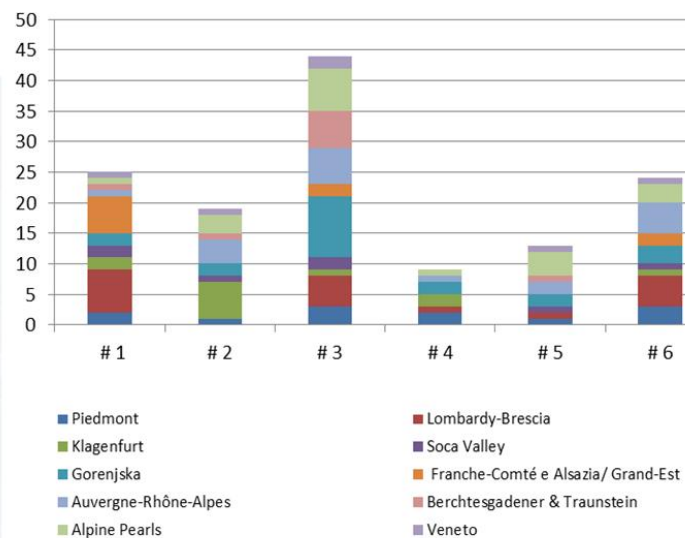
WHAT WAS DONE in the Project:
Regional Action Plans in 11 Partnership territories – example for other territories

SCOPE
- Define **coherent actions to achieve common objectives** in the Alpine Space Area
- Help implementation of a common Alpine Space **Strategy** at Regional/Local level;
- **Support the transportation choices of Public Administrators** to implement interoperable E-CS

RAP actions distribution according to strategic Pillars

Legend:
- Piedmont
- Klagenfurt
- Gorenjska
- Auvergne-Rhône-Alpes
- Alpine Pearls
- Lombardy-Brescia
- Soca Valley
- Franche-Comté e Alsazia/ Grand-Est
- Berchtesgadener & Traunstein
- Veneto

e-MOTICON Strategy

#1 DEFINE THE BEST POSSIBLE ROLES OF PUBLIC AUTHORITIES	#3 COMPLETE THE MINIMUM INFRASTRUCTURE	#5 EMPOWER COMMUNICATION AMONG PUBLIC AUTHORITIES
#2 SET COMMON MINIMUM RULES ON INFRASTRUCTURE	#4 ADOPT AN INTEGRATED, SUPRA-REGIONAL MAPPING TOOL	#6 GUARANTEE SYNERGY AMONG PRIVATE AND PUBLIC TRANSPORT

- "5 golden rules" for Regional Public Administrations
- "5 golden rules" for Municipalities

E-MOTICON
e-Mobility Transnational strategy for an Interoperable Community and Networking in the Alpine Space
WHITE BOOK

Interreg
Alpine Space
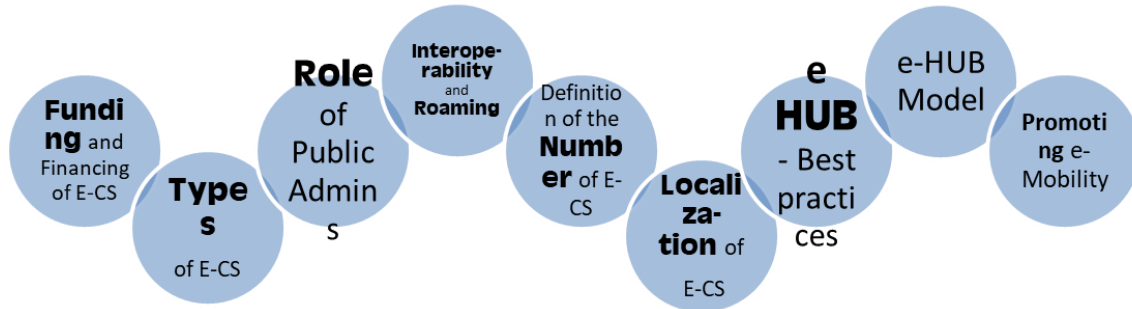E-MOTICON

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Tools

Interreg Alpine Space
E-MOTICON

The on-line training courses for PA

Guidelines

Funding and Financing of E-CS

Types of E-CS

Role of Public Admins

Interope-rability and **Roaming**

Definition of the **Number** of E-CS

Locali-za-tion of E-CS

e HUB - Best practices

e-HUB Model

Promoting e-Mobility

E-MOTICON

e-Mobility Transnational strategy for an Interoperable Community and Networking in the Alpine Space

GUIDELINES

Shape and name	Standard		
Schuko plug	IEC 60884		
Type 2	IEC 62196-"Type 2" VDE-AR-E 2-2 ("Mennekes		
CCS Combined Charging System	IEC 62196-combined with 62196-2 and including IS 15118 (DIN 70121)		
CHAdeMO	IEC 62196-3 ISO/IEC 61851-23 and 61851-24	for fast DC charging; up to 100 kW (in practice 50 kW)	fixed connection at E-CS, plug connects to car; mainly used by Japanese cars, often available at fast charging E-CS in Europe

Interreg Alpine Space **E-MOTICON**

Elektrofahrzeuge während des Ladevorgangs **frei**
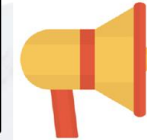
BEST PRACTICE ›››››››››››››
E-GRAND TOUR OF SWITZERLAND

CAMPAIGN "TESTING AN E-CAR FOR 6 DAYS FOR 60 €"

TRAVELLING EXHIBITION ELECTROMOBILITY

← Stromtankstelle

Pilot e-HUB: Understand which **communication** measures help to ensure **legal and political interoperability**

Pilot e-TRAIL: Understand which measures help to **ensure technical interoperability** (Setting up interoperable systems &User information platforms & eRoaming platforms)

Pilot P&L (Process & Location) Understand which measures help to ensure a **good localization** of EV charging Station

The 3 Pilots experiences

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e-MOPOLI - Electro MObility as driver to support POLicy Instruments for sustainable mobility

e-MOPOLI
Interreg Europe

European Union
European Regional
Development Fund

- **Limited awareness of public administration** about alternative fuels and e-mobility potential

- **Low capability on planning its development**, often causes a **limited application** of good practices

- I**neffective deployment of public (Structural) funds** and **limited impact on the reduction** of congestion and pollution in urban areas.

➢ Developing **effective policies to increase the knowledge and introduce behavioral change;**

➢ **Strengthen the innovation elements in the fuels policy** as part of the wider regional efforts to lower or zero CO2 emissions.

Partners
Province of Brescia
Calabria Region – Infrastructure department n.6
BSC Ltd, Kranj, Regional Development Agency of Gorenjska
Region of Attica
Flemish government Department Environment
Regional Council of Kainuu
Rogaland County Council
Bucharest-Ilfov Regional Development Agency
Zemgale Planning Region

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Learning process: sharing knowledge and experiences to define the ROP Acton Plans

Specific objectives

Set of **9 policy instruments** with the specific objectives:

- <u>charging and tolling policies favoring e-vehicles</u>, increasing accessibility to charging infrastructure for both public and private sector in urban and rural areas, and alternative fuels mobility;

- development of <u>charging infrastructure powered by alternative sources</u> like biogas;

- support to the deployment, purchase of <u>alternative fuel vehicles in public transport</u> by financial incentives and setting up regional financial support schemes;

- promotion of <u>electromobility in niche market fleets</u> (i.e taxi), <u>public transport</u> (bus and ferry fleets) <u>and urban logistics</u>;

- promotion of new measures favouring <u>public-private partnership (PPP) in e-mobility sector</u>;

- <u>enhancement of the capability of public authorities</u> in developing effective policies for reducing the carbon footprint of transport activities, addressing general and specific challenges of environmental protection included in Operational Programmes.
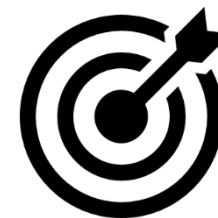
- In the Alpine Space **e-vehicles are strongly increasing**

- Public Administrations should support this diffusion and a **better perception of citizens** about e-mobility benefits, by experimenting and **investing on e-mobility in Local Public Transport (LPT) and City/Last-Mile Freight Logistics (LML) sectors**.

- e-mobility applied to LPT and LML can demand a higher, localized energy density therefore it's necessary to invest for the **electricity grid reinforcement** that should be planned in advance taking in consideration the **link to RSE and micro-grid and local energy community models**.

The challenges to overtake:

> **PAs' awareness** of energy & smart grid functionalities, charging infrastructure localization planning and digitalization,

> **coordination among public and private actors**, therefore support a participatory approach

> data availability and sharing among public and private in a **smart village ecosystem vision**

Thanks to **cooperation of regional and local authorities with the private sector**, the project will **design and test an operational model to plan E-CS** (Electric Charging Stations) in the framework of **smart grid, smart territories and e-mobility services in passengers and freight transports** (**Local Public Transport and City/Last-Mile Freight Logistics**)
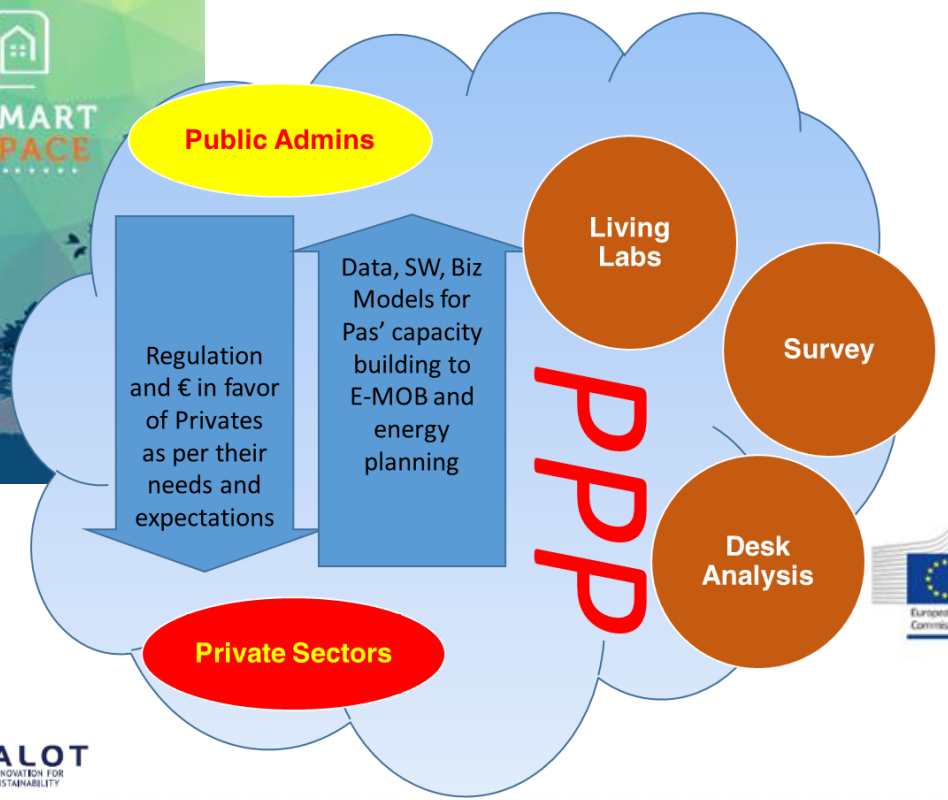
Core Output 1
Policy Road-Maps for common benefits:

Government

- Effective Procrement resulting in services, solutions and architectures that are interoperable
- Data driven policies
- Attracting private investment
- Higher quality, greener mobility for Alpine region

Private Sector

- Business Development
- Facilitate partnerships with public sector
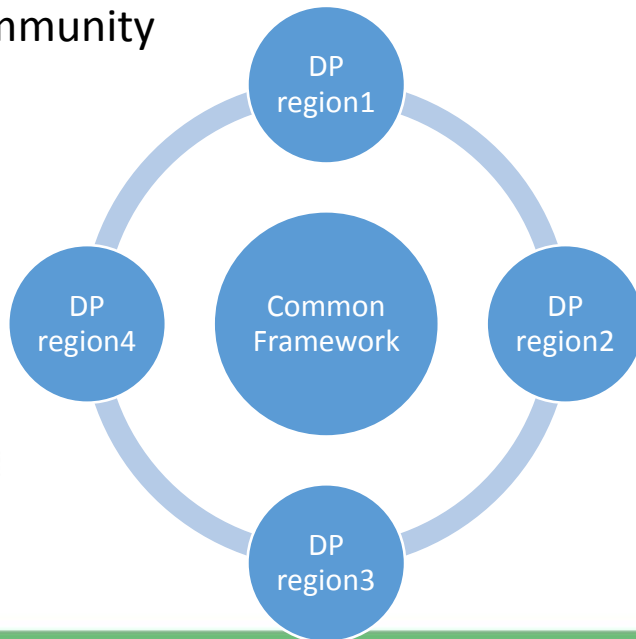- Enable and sustain local companies
- Scale!

Territory Citizens

- Better, greener, multi-modal mobility
- More (green and digital) services
- New job opportunities
- Enhanced quality of life

Core Output 2:
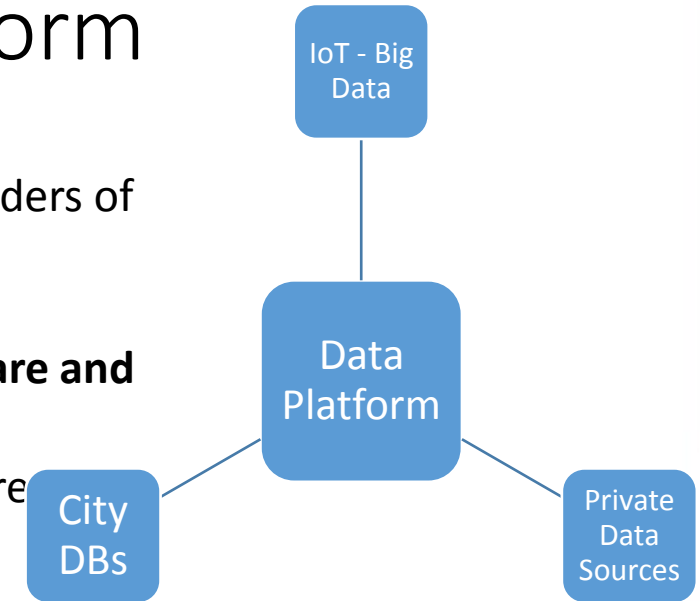# Model of Regional Data Platform

What and Why:

- A **unique and comprehensive source** of services and information for main stakeholders of a region to facilitate development of green and digital , public and private services according to new business models

- A place where stakeholders, referring to different application domains, can join, **share and build new attractive Services** to citizens and companies

- An extremely powerful **tool for planning social and economic development** of the re[...] community

IoT - Big Data

Data Platform

City DBs

Private Data Sources

DP region1

DP region4

Common Framework

DP region2

DP region3

How:

- Developing a **joint feasibility** study which defines **how to design and implement** a data platform for all regions

- Defining a **shared framework** for the regional community able to **sustain independent implementation** in each region

- Implementing a **real pilot** for those regions interested to test the platform

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To sum-up: lessons learned

1. Fast Track to Innovation (FTI) of private sector trends;

2. Jointly actions with knowledge merge from Universities and Competence Centers

Therefore ...

3. Collaboration and Public-Private Partnership to gain a greater awareness and to enable tools (planning and monitoring) related to e-mobility, smart grids, smart territories and digitalization:
    - Inclusion process to express needs and find effective solutions
    - Strategic tools for planning (transnational and operational road map).

4. Digital initiatives to facilitate planning and monitoring of electric mobility for private users but moreover where the PA are planning as per Public Transport and Freight transport sectors jointly with the energy smart grids (ecosystem, data platform, database, applications, etc.)

    Moreover:

5. Policies with a multi-sectorial integration: mobility, energy, environment, R & I, social rights & education

Thank you for your attention
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