

“Efficient vehicles in the promotion of sustainable energy development of Andalusia”

Andalusian Energy Agency

Karlskrona, March 8th 2017

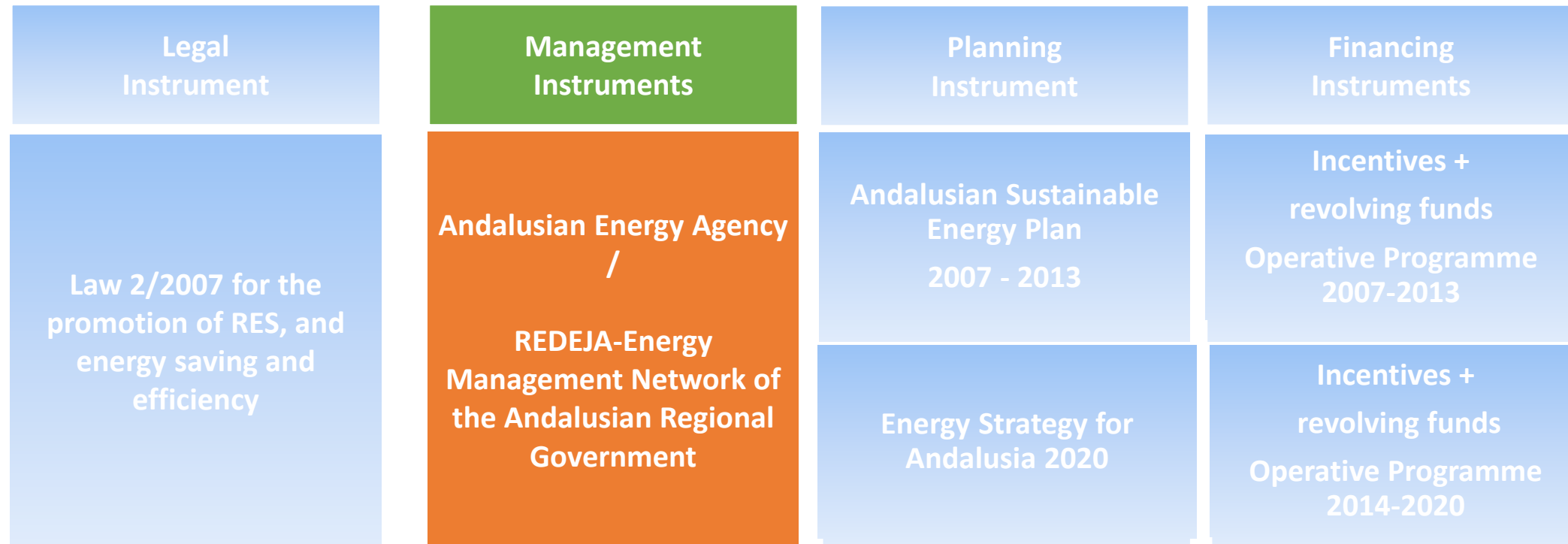


Agencia Andaluza de la Energía
CONSEJERÍA DE EMPLEO, EMPRESA Y COMERCIO

Energy model instruments for Andalusia

Legal Instrument	Management Instruments	Planning Instrument	Financing Instruments
Law 2/2007 for the promotion of RES, and energy saving and efficiency	Andalusian Energy Agency / REDEJA-Energy Management Network of the Andalusian Regional Government	Andalusian Sustainable Energy Plan 2007 - 2013	Incentives + revolving funds Operative Programme 2007-2013
		Energy Strategy for Andalusia 2020	Incentives + revolving funds Operative Programme 2014-2020

Energy model instruments for Andalusia



Management instruments: Andalusian Energy Agency

Public entity created in 2005, assigned to the Regional Ministry of Employment, Business and Trade of the Andalusian Government

OBJECTIVES

- ✓ **General:** Ensure optimisation, in energy, economic and environmental terms, of the energy supply in Andalusia
- ✓ **Strategic:** Involve the Andalusian society in order to promote the need to use efficient forms of energy and the maximum use of renewable energies



Management instruments: REDEJA-Energy Management Network of the Andalusian Regional Government

Created to promote and carry out activities aimed at improving **energy efficiency**; promoting the use of **renewable energy**; achieving the optimisation of energy contracts in **buildings** of the Andalusian Regional Government and other public entities.

REDEJA

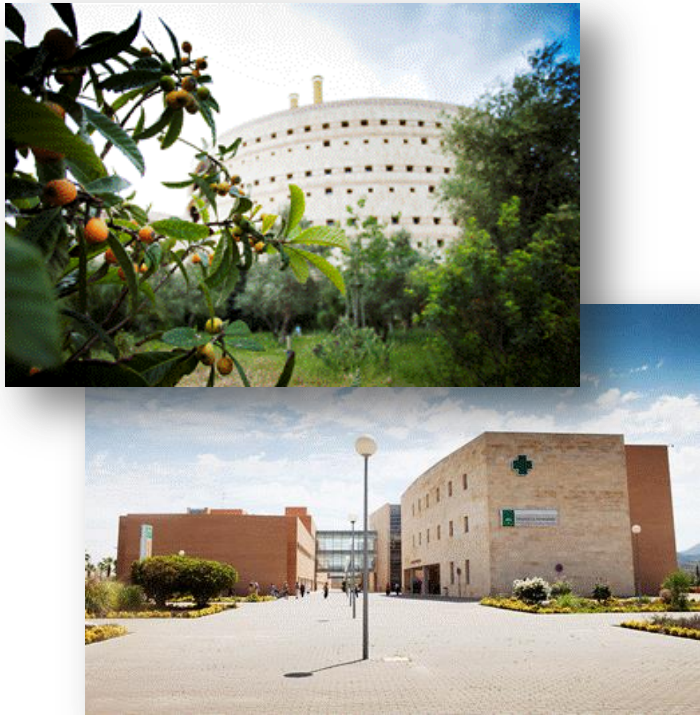
Pioneer tool in Spain to boost sustainable energy principles in the **Andalusian government**.

Takes **advantage of the high economic and energy potential** in buildings of the Andalusian Regional Government.

The Andalusian Energy Agency is responsible for a **specific, coordinated and effective management of the energy bills of all entities and agencies of the Regional Government**, and since 2014, of other public entities.

The various **actions** carried out by **REDEJA** have allowed an **economic saving of 53.9 Million euros for the Andalusian Regional Government**.

Management instruments: REDEJA-Energy Management Network of the Andalusian Regional Government



Agreements for investments managed through REDEJA achieve:

- ✓ Energy saving and efficiency and the use of renewable energy sources (hospitals of the Andalusian Health Service and administrative buildings of the Andalusian Regional Government): change lighting, replacement of boilers, cooling plants, heat pumps, rehabilitation of facades, roofs, cogeneration plants, solar thermal installations, and the like.
- ✓ Sustainable mobility and energy saving and efficiency in infrastructure related to transport: studies, plans, audits, improving electric vehicles, like the following project.

Sustainable Transport Projects: Replacement of the courier and parcel fleet



Replacement of the courier and parcel fleet



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Financing instruments



“ANDALUCÍA A+” Programme for the sustainable energy development of Andalusia.



PROGRAMME TO PROMOTE SUSTAINABLE CONSTRUCTION in Andalusia.



Unión Europea

Fondo Europeo de Desarrollo Regional



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Financing instruments

Andalucía **A+**

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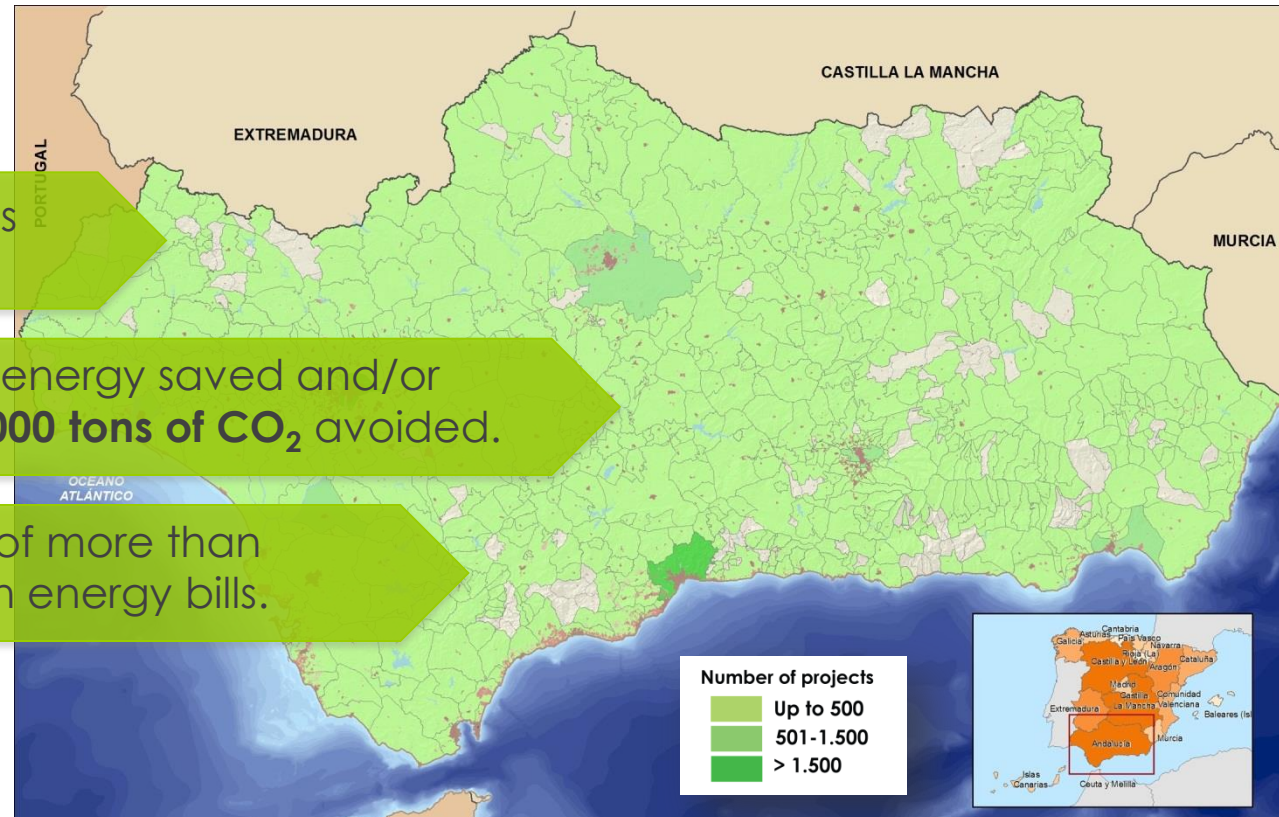


THE INCENTIVES PROGRAMME. IMPACT AND FINAL RESULTS I

Near **36.000** actions implemented.

36.000 toe/year of energy saved and/or diversified and **85.000 tons of CO₂** avoided.

Economic saving of more than **320 million euros** in energy bills.





THE INCENTIVES PROGRAMME. IMPACT AND FINAL RESULTS II



242 M€ investment.

More than **8,300 collaborating** companies.

17,000 direct jobs for the implementation and management of actions.

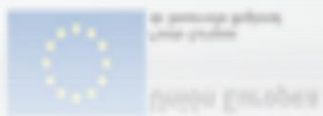


Mejor Proyecto Europeo **REGIOSTAR 2015**

Ahora Andalucía es A.



Programa de impulso a la
**CONSTRUCCIÓN
SOSTENIBLE**
en Andalucía



New!!!:PARTNERSHIP OF EUROPEAN REGIONS ON ENERGY EFFICIENCY IN BUILDINGS



Web: <http://s3platform.jrc.ec.europa.eu/s3p-energy>

Improving the energy efficiency of buildings in Europe through interregional collaboration between public and / or private entities, with the aim of **promoting the development of innovative solutions throughout the value chain**, associated to energy saving and the use of renewable energy in buildings

“S3 Energy Partnerships” offering interactive and participatory areas for interregional cooperation. A platform for mutual interregional cooperation area.

SUSTAINABLE CONSTRUCTION PARTNERSHIP:

Interested regions:

- Andalusia, Navarra (ES).
- Norra Mellansverige and North Midsweden (SE).
- Jamtland Region (SE)
- Lapland (FI)
- Gloucestershire County (UK)
- Gorenjska (SI)
- Rzeszow (PL)
- North-West Croatia (HR)
- Lithuania (LT).

Identified links with other initiatives:

Errin Energy Working Group
Interreg Europe project BUILD2LC.

Financing instruments

Andalucía **A+**

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Financing instruments

THE PATH TAKEN since 2009:



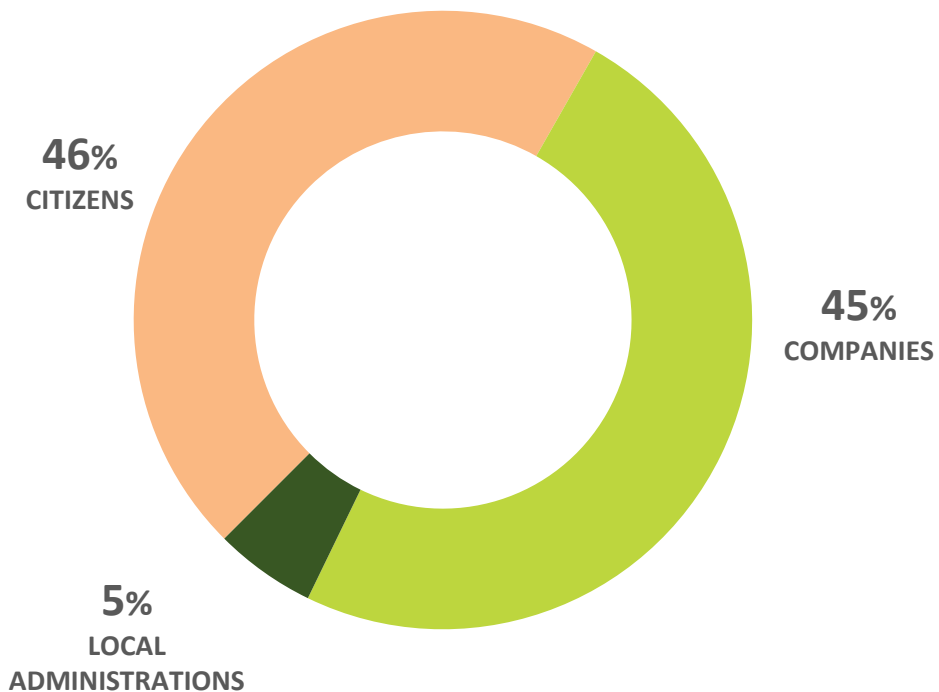
136.080

APPROVED REQUESTS

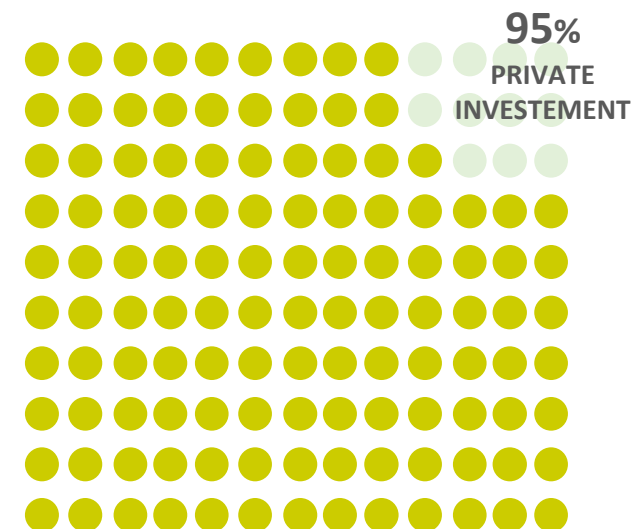
INVESTMENT

1.283

MILLION EUROS



**1,7% Andalusian
GDP 2014**



GDP Gross Domestic Product



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IMPACT OF THE PROGRAMME

Energy results



SAVINGS IN PROCESSES

83.169

toe/year



SAVINGS IN BUILDINGS

32.048

toe/year



SAVINGS IN LIGHTING

10.741

toe/year



EFFICIENT VEHICLES

8.219



PHOTOVOLTAIC SOLAR ENERGY

1.733

kWp



THERMAL BIOMASS

456.814

kW



THERMAL SOLAR ENERGY

306.907

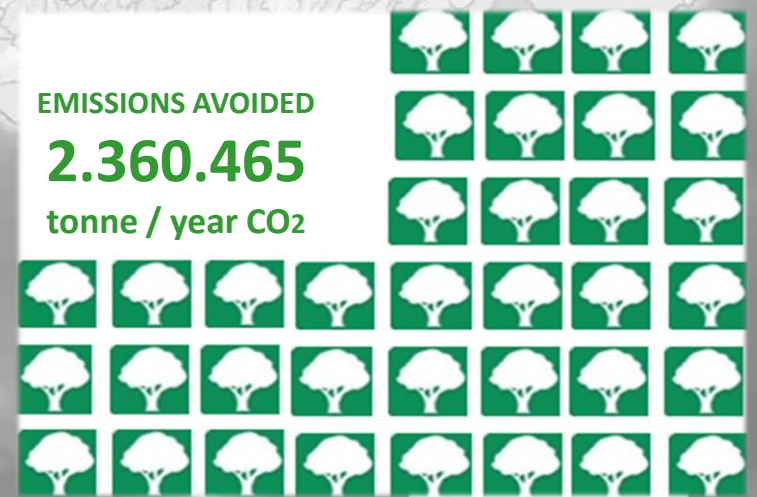
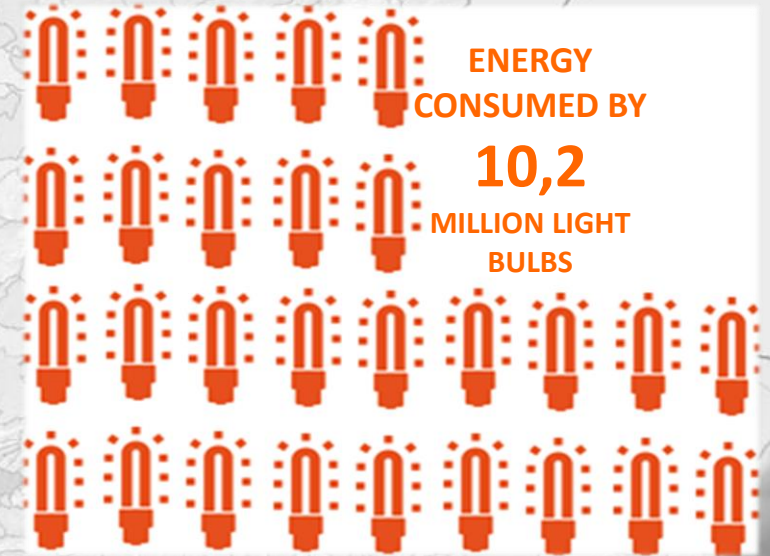
m²



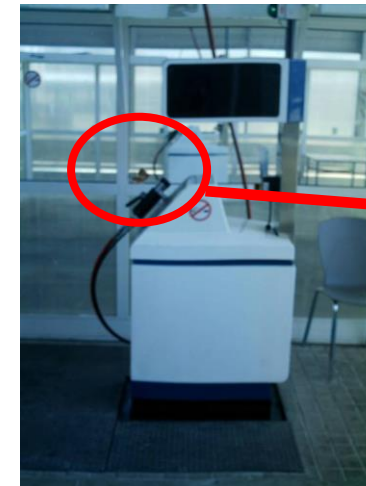
BIOMASS TREATMENT

472.844

toe/year



Sustainable Transport Projects: Compressed Natural Gas Project, in Seville:



Sustainable Transport Projects: Electric vehicles on a public fleet, Córdoba:



Situation:

- Town with high air and acoustic pollution
- High density population
- High heritage value

Target: To operate a urban line with "zero emissions" at the place of use.



Project: Acquisition of 3 electric vehicles for public passenger transport service

Investment: 239.500 €
3 Units: 718.500 €

Public support 35%

Public support: 251.475 €



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Sustainable Transport Projects:

- Provision of a service of quality
- Not noise pollution
- No air pollution
- Small vehicles
- More efficient energy
- Neighborhood acceptance
- Better conditions of health
- Improvement of the image of the city
- Energy improvement
- Economic saving



Water company electric fleet in Málaga:



Electric vehicles in private fleets:



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The future: Our energy objectives - The Energy Strategy for Andalusia 2020



REDUCE BY 25% THE TENDENTIAL PRIMARY ENERGY CONSUMPTION



PROVIDE 25% OF FINAL GROSS ENERGY CONSUMPTION WITH RENEWABLE ENERGY



5% SELF-CONSUMPTION OF ELECTRICITY GENERATED WITH RENEWABLE SOURCES



DECARBONIZE THE ENERGY CONSUMPTION BY 30% COMPARED TO 2007



IMPROVE BY 15% THE QUALITY OF ENERGY SUPPLY

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THREE LINES FOR SPECIALISATION

The Programme: a review:

- ✓ 4 years duration: from 2017 to 2020
- ✓ Budget: 227 M€
- ✓ 76 different kinds of projects, 3 Lines:

Andalucía es más
Programa para el
Desarrollo Energético
Sostenible de Andalucía

SUSTAINABLE SMEs

Energy improvement of processes, renewable energies, cogeneration, residual heat and energy efficiency. Use of ITC and implementation of Energy Management Systems. Communication of the sustainability.

36 MM€

SUSTAINABLE CONSTRUCTION

Energy rehabilitation of buildings, lighting architecture, renewable energy, energy improvement of installations in buildings and cities.

164 MM€

SMART GRIDS

Intelligence in electric grids, quality of supply, sustainable mobility, acquisition and charging of alternative vehicles, renewable energies for mobility. Citizen awareness.

27 MM€



Tools to promote Low Carbon Transport:

B.1. Infrastructures and processes that facilitate the use of electricity or alternative fuels.

B.1.1. Installations for alternative fuel supply.

B.1.2. Use of renewable energy for sustainable mobility.

B.2. Acquisition or transformation of energy efficient vehicles.

A) Linked to vehicles of cleaning, maintenance, security, social services (education, health ...)

B) Linked to vehicles of passenger public services

B.3. Awareness raising measures for sustainable mobility.

C. Low carbon transport measures through Energy Services.



Thank you very much for your attention!!!

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