



Co-funded by the Intelligent Energy Europe Programme of the European Union

EU COMMUNITY
INTELLIGENT ENERGY EUROPE
Promotion & Dissemination Projects
Electric City Transport – Ele.C.Tra

D.6.6 Non-pilot City Plan for Murcia

Project Co-funded by the Intelligent Energy Europe Programme of the European Union

01 July 2013 – 31 December 2015

Work Package 6

POST-OPERAM

Task:

Non-pilot city plan fulfilment

Scientific Coordinator:

Genoa

WP Coordinator:

Zagreb



Co-funded by the Intelligent Energy Europe Programme of the European Union

Electric City Transport – Ele.C.Tra.

Deliverable Title: Structure template for Non-pilot City Plan (D.6.6) for all non-pilot cities

Partner Responsible: MURCIA

Work Package 6: POST-OPERAM

Submission Due Date: 31/12/2015

Actual Submission Date: 18/12/2015

Dissemination level: PU

Abstract:

This document includes the main aspects regarding development of Non-pilot City Plan (D.6.6) for all non-pilot cities

Document Information Summary

Deliverable Number:	6.6
Deliverable Title:	Non-pilot City Plan
Editor:	T Bridge and Zagreb
Work package no:	6
Work package leader:	ZAGREB
Work package participants:	Non-pilot cities
Main Target Audiences:	Partners
Version/Revision:	V1
Draft/Final:	Final
Keywords:	Non-pilot

DISCLAIMER

The sole responsibility for the content of this [webpage, publication etc.] lies with the authors. It does not necessarily reflect the opinion of the European Union. Neither the EACI nor the European Commission are responsible for any use that may be made of the information contained therein.

Grant Agreement Number: IEE/12/041/SI2.644730 – Ele.C.Tra

Start Date: 01 July 2013

Duration: 30 months

Document Approval

Approved by	Date
Steering Committee:

TABLE OF CONTENTS

1 Murcia scenario and nº of planned light electric vehicles in the Municipality 5

2 Key participants in the preparation and implementation of the electric vehicles sharing system..... 7

3 Promotional activities and education 8

5 Conclusion 12



1 Murcia scenario and nº of planned light electric vehicles in the Municipality

The Municipality of Murcia currently owns the following e-light vehicles:

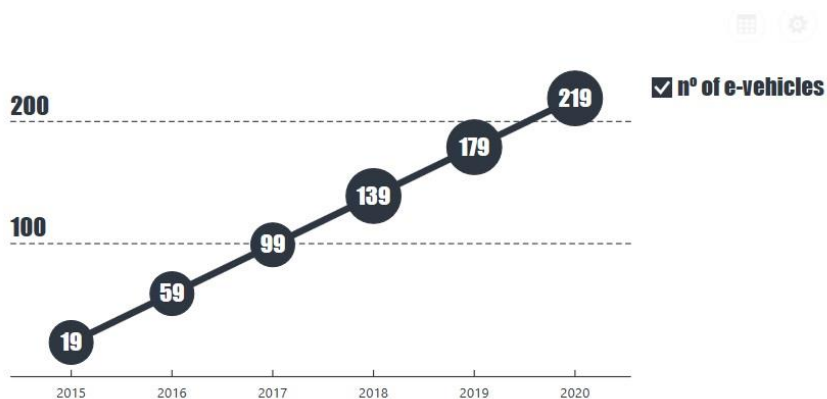
- 9 electric light quadricycles Commarth
- 2 electric scooters
- 4 electric Renault Twizy
- 4 electric tricycles smartwork.

Apart from that, there are another 30 electric Piaggio Porter mini-van that are currently being used in parks and gardens maintenance. The Municipality has already asked for funding in one of the national entity for sustainable development scheme for the purchase of the following vehicles in 2016:

- ✓ 25 electric scooters for different local council departments with special requirements for mobility such as: parks and gardens department, industrial engineering department, youth and sports department and the Local energy Agency.
- ✓ 20 electric light cars for certain activities that require the load of light materials and equipment that are common to all Murcia city council departments.

On the other hand, the Municipality is preparing its “Local strategy for the electric vehicle promotion” that will include a binding commitment for enlarging the electric fleet for the next 5 years. The document is in a draft stage but the expected figures can be shown in the chart below:

Electric fleet in Murcia Municipality



The expected increase in nº e-vehicles per year is:

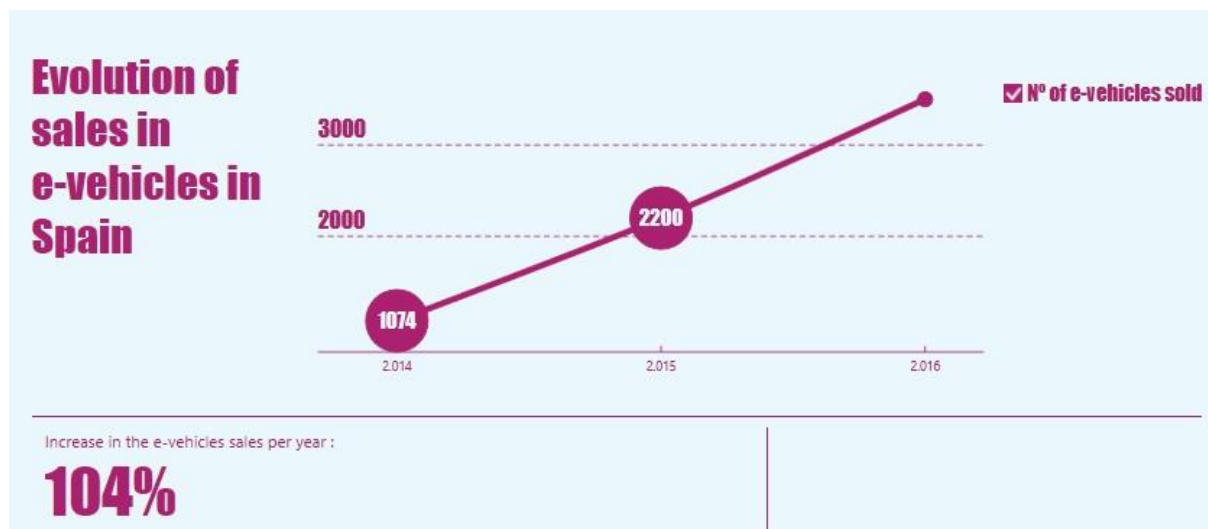
40 until 2020

Note the following...

The figures include e-scooters + e-light cars

We assume that the coming national funding scheme for electric vehicles will provide at least as much economic support as in the 2016, therefore, the increase in the electric fleet of Murcia City will continue steadily.

In the same way, the private sector will surely follow similar trend. In the following chart we can how the sales of electric vehicles in Spain has been evolved during the last 2 years, see graphic nº1. The number of electric vehicles has doubled indeed. Using that ratio we can suppose that the number of e-light vehicle will follow the evolution shown in graphic nº2.



Graphic nº1- Evolution of sales in e-vehicles in Spain



Graphic nº2- Expected evolution of sales of e-light vehicles in Murcia

Therefore, merging the expected electric light vehicles both of public and private ownerships we find the following total:

	2015	2016	2020
Nº of E-light vehicles in Murcia	49	119	1.179

2 Key participants in the preparation and implementation of the electric vehicles sharing system

The involvement of certain stakeholders and key actors to guarantee the success of an electric scooter sharing system in Murcia is crucial. Needless to say that depending on the scale of the business and its target group, it will have to commit some stakeholders or another. Coming from a wide initial scenario we could mention the following key participants in the preparation and implementation of an electric vehicles sharing system in Murcia.

- A. Business stakeholders (suppliers and distributors of electric vehicles, infrastructure and technology, equipment service, system operators, electricity suppliers, etc.). Below we have some examples of Business stakeholders in Murcia.
 - a. Emisiones 00
 - b. Murcia Sobre Ruedas
 - c. EDE energy
 - d. Iberdrola
 - e. Gas natural Fenosa
 - f. IBIL
 - g. Scutum
 - h. Otros fabricantes y distribuidores de motocicletas eléctricas

- B. Demand stakeholders (large companies, schools, university facilities, tourist offices, hotels, shopping centres, etc.). Below we have some examples of demand stakeholders in Murcia
 - a. Disfrimur
 - b. Estrella de Levante
 - c. El Corte Inglés
 - d. UMU (Universidad de Murcia)
 - e. UCAM (Universidad Católica San Antonio Murcia)
 - f. Centro Comercial Thader
 - g. Centro Comercial Nueva Condomina
 - h. Hoteles del centro de Murcia

- C. Institutional stakeholders (local authorities, public bodies, associations, research institutes, etc.)



- a. INFO. Instituto de Fomento de la Región de Murcia
- b. Ministerio de Industria
- c. Ayuntamiento de Murcia. ALEM, Agencia Local de Energía y Cambio Climático
- d. Colegio Asociación de Ingenieros Industriales de la Región de Murcia
- e. Colegio Asociación de Arquitectos de la Región de Murcia
- f. Dirección General de Industria de la Comunidad Autónoma de Murcia
- g. Asociación de comerciantes Murcia Centro
- h. Asociación de comerciantes Barrio del Carmen
- i. Asociación de parking públicos de Murcia
- j. AEDIVE. Asociación para el Desarrollo e Impulso del Vehículo Eléctrico
- k. AVELE. Asociación española para la promoción de la movilidad eléctrica

3 Promotional activities and education

Information and promotion campaigns about the benefits of electric scooters and why is important to shift to sustainable mobility are indispensable for the development of the demand of this type of vehicles in the municipality of Murcia.

Some planned actions towards raising awareness and social sensitization among our citizens include the following:

- Conduction of information sessions aimed at specific groups, such as groups of students, both from secondary schools and universities, logistics companies from Murcia, workers of car dealerships and general society.
- Collaboration with local media to disseminate the characteristics and benefits of the electric motorcycle. Some examples could be the publication of articles in local newspapers trying to reach the target audience of electric vehicles as much as possible.
- Creation of promotional materials for electric vehicle providers and local stakeholders involved in the promotion of the electric vehicles. This kind of action could help to disseminate and inform people about how to go about and install an EV-charging point in communities and private houses.
- Edition of booklets with information on the location of public charging points and information on the electric vehicles and specifically motorcycles. These booklets will be distributed at dealerships and information points of public buildings.
- Provision of information through the websites of municipality and ALEM.
- Tailor made seminars to associations and potential users interested in electric scooters in order to solve doubts and provide them with the right tools to get the most out the electric vehicles.
- Celebration of an annual exhibition of electric vehicles and information stand, as it is being done in the European Mobility Week in Murcia.

- Launch a study about how to tackle the barriers for the deployment of the electric vehicle in Murcia with the support of the UMU, public University of Murcia.
- Contact with all the Municipalities of Murcia Region (45) in order to share the strategy of Murcia city Council to promote and support the deployment of the electric vehicle and the outcomes of the Electra Project in particular.
- Create an intermodality campaign focused on integrating the use of electric vehicles on the existing scenario of mobility in the city of Murcia.

E-vehicle testing experience

Currently, most of Murcia citizens are not familiar with electric vehicles and e-scooters in particular, so tackle this problem is undoubtedly important to bring this kind of vehicles closer to them through live testing and exhibitions where they can use these vehicles and be taught about their main characteristics. That point is needed because people have to know how the vehicle works before they think of purchasing it.

Similarly, one of the major constraints faced by potential users was the "battery recharge", so for familiarizing citizens with all the dimensions of the electric motorcycle, they need to test not only the vehicles but also their charging systems. The current charging systems allow recharging the battery very easily in any electricity connection, whether it is located in the house of the individual or elsewhere. Also, the battery charger is included in with the motorcycle, and it is very easy transportable and can be used with any outlet with power.

4 Schedule for establishing the electric vehicles sharing system

The role of the Murcia City Council regarding the implementation of an electric sharing system has to be understood as a catalyst. The Municipality will use the available resources and infrastructure to support this type of business but it is important to bear in mind that the business model must fulfill a number of requirements to prove it is economically sustainable.

Secondly, the schedule that is going to be shown (Gant chart) is linked to the type of business model that has been assessed in the Electra project's feasibility study from Murcia. Therefore, in order to get more information and details about particular aspects about the implementation of the model it is advisable to consult it.

As it is shown in the Gant chart, there has been foreseen a 5 month period for monitoring and analyzing the progress of the business. After that period a comprehensive assessment of the model should be done in order to propose corrections measures to guarantee the feasibility of the model

with real inputs. At the same time, the outcomes of this first 5 months of the model could point out the need to enlarge the business to satisfy a potential growing demand.

It is important to note that the promotional activities planned to be perform from month 16 to 18, will be crucial to make the business known in the city and in particular to the potential users and target groups.



GANT CHART OF ACTIVITIES		MONTH																			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	Initial interest from a potential bussiness operator	█																			
2	Kick off Joint meeting- Bussiness operator and Municipality		█																		
3	Definition of cooperation agreement - Bussiness operator and Municipality			█	█																
4	Signing the cooperation agreement					█															
5	Study and evaluation of bussiness models		█	█	█	█															
6	Deinition and selection of target groups, rental rates, selling prices			█	█	█															
7	Selection of bussiness model						█														
8	Search for funding options						█	█	█												
9	Search for commercial agreement with potential users of the system						█	█	█												
10	Meetings to stablish communication and advertisement campaign									█	█										
11	Initial steps to setting up the bussiness									█	█	█	█	█							
12	Start of the commercial activity															█					
13	Promotional activities																█	█	█		
14	Monitoring and supervision of the business															█	█	█	█	█	
15	Analysis of first results and corrective measures proposal.																				█

Gant chart for the implementation of a potential electric scooter business model in Murcia



5 Conclusion

Although the existing number of electric vehicles and electric light vehicles in the Municipality of Murcia is very limited, the following reasons allow us to be optimistic for the coming years regarding the deployment of the electric mobility in general terms.

- The prospects and the trend on e-vehicles sales are reasonably good. The e-vehicles sales have increased considerably both in Spain and in Murcia during last year.
- There will be a national funding scheme in 2016 and onwards for the purchase of e-vehicles that will keep on encouraging the shift to electric mobility both in private and public sector.
- The continuous alarms of pollution in big cities are raising awareness on reducing the use of fueled-engine vehicles and will surely triggered new policies for supporting electric mobility.

The business model for an electric scooter sharing system proposed in Murcia could definitively help to bring new e-scooters to the streets progressively and could lay the foundations to other innovative systems to promote electric vehicles. What must be taken into account is the definition of the target groups for that system and create a tailor made and well-structured communication and dissemination campaign and be able to guarantee its effectiveness through the involvement of proper local entities.

Murcia City has a great potential for the deployment of the electric scooter due to the fact there are a considerable amount of scooters, it has a flat orography and there are many surrounding districts that can be connected to the city center by a light vehicle such as an e-scooter. Fortunately most of the barriers and constraints about electro mobility in Murcia come from the lack of awareness and disinformation. In that sense, local councils have big responsibility and a key role on promoting and supporting electro mobility by some of the measures mentioned in section 3 of this document.