



ELE.C.TRA. MODEL AND ELE.C.TRA. KIT

ELE.C.TRA FINAL COn.FREE.NCE TO "E" OR NOT TO "E" THAT IS THE QUESTION OF (E)MOBILITY

Electric City Transport - Challenges of New Urban Mobility Models Towards EU 2020 Targets

Lisbon, 25th November 2015







The Ele.C.Tra Project

develops a new MODEL of sustainable urban mobility based on light electric vehicles







Ele.C.Tra. Model created the basis for the carrying out of the actions in order to promote the emobility of light vehicles (scooters, quadricycles, etc.) 3 PILOT CITIES

7 NON-PILOT CITIES

ASSOCIATED PARTNERS (FOLLOWERS)

BARCELONA



GENOA



FLORENCE





The model defined the project approach for the encouragement of the diffusion of EV in each area, starting from the project results and taking into account light vehicles, such as scooters, where their modal share is high and it is difficult to shift their use to other more sustainable transport means.

INPUTS

- **✓ SURVEY RESULTS**
- ✓ MOBILITY **CHARACTERISTICS AND BOTTLENECKS**
- **✓** BEST PRACTICES
- ✓ SUPPORT GROUP INVOLVEMENT

OUTPUT

ELE.C.TRA MODEL

- **GOVERNANCE**
- **SERVICES**
- **VEHICLES**
- **INFRASTRUCTURE**

- **✓ CONTEXTUALIZA-TION**
- ✓ AGREEMENTS WITH **STAKEHOLDERS**
- **SERVICE AND PRODUCT NETWORK**
- ✓ OPERATIVE PLAN

IN THIS WAY, EVERY TEST HAS STARTED AND WILL START WITH ELEMENTS ALREADY DEFINED INSTEAD OF STARTING FROM SCRATCH









KEY ASPECTS OF THE MODEL



SELF-SUSTAINABILITY

the project does not include any financial funding to "force" the market or to acquire e-vehicles directly. The model can continue beyond the project and in external contexts

AREA OF APPLICATION

all light e-vehicle types (category L, 2002/24/EU Directive)

USER TARGETS

- young people (16-35 years old)
- students or workers
- those who take short day trips homeschool/office (max ~30 minutes)
- men and women have very similar interests





OUTPUT

- 1. GOVERNANCE √
- 2. SERVICES
- 3. VEHICLES
- 4. INFRASTRUCTURE







"Governance" refers to all processes of management and decisions that seek to define actions, improve solutions and verify performance for the implementation, without directly including infrastructural actions

Area Mobility Management Offices



User incentives



Stakeholder involvement



Communication project activities







FOCUS ON USER INCENTIVES

- ✓ regulatory framework restricted traffic zones use by e-vehicles (done) in Genoa and Florence) or toll discounts to access (Barcelona)
- ✓ new e-columns for e-charging (in Florence with regional co-financing)
- reserved parking areas for EVs (done in Florence), free e-vehicle parking or discounts (Barcelona);
- ✓ reduction on the cost of insurance, exemption from payment of vehicle. taxes for five years (Italian national subsidy), national subsidies for the purchase of EVs (Spain);
- ✓ use of reserved lanes (Barcelona) together with public transport
- √ fast e-charging for e-taxis, thanks to public/private partnerships (Barcelona)
- other options to be evaluated



LAUNCHING EVENT, 2013-12-13





OUTPUT

- 1. GOVERNANCE
- 2. SERVICES √
- 3. VEHICLES
- 4. INFRASTRUCTURE





The Model identifies **several types of service** to allow each city to choose the most suitable service or services or to tune with needs and issues:

- Buying by citizens or tourists, with discounts if possible
- Hiring for periods longer than a few days and up to 6 months, focusing on workers' and students' needs
- Sharing for short periods (max a few days), mainly focusing on tourist needs or non-systematic resident trips
- End purchasing after hiring/sharing



25/11/2015



OUTPUT

- 1. GOVERNANCE
- 2. SERVICES
- 3. VEHICLES √
- 4. INFRASTRUCTURE √



25/11/2015





The **Model** analyzed the relationship between type and technologies of vehicle and user targets

TARGET	POWER	TYPE OF BATTERY	REMOVABLE BATTERY	OTHER
SYSTEMATIC SHORT TRIPS	≤ 4 Kw	Lead; Lead Gel	better YES	
(WORKERS AND STUDENTS)		Silicon Gel; Lithium		
SYSTEMATIC LONG TRIPS	> 4 Kw	Silicon Gel: Lithium	better YES	
NON-SYSTEMATIC TRIPS (TOURISTS	both	Lead; Lead Gel	Not relevant	2 or more seats for
AND RESIDENTS)		Silicon Gel		each vehicle
		Lithium		
COMPANY FLEETS FOR	<= 4 Kw	Lead; Lead Gel	better YES	
INTERNAL/SHORT TRIPS		Silicon Gel		
		Lithium		
COMPANY FLEETS FOR URBAN TRIPS	> 4 Kw	Silicon Gel	better YES	
		Lithium		
GARAGE	Not relevant	Not relevant	better YES	
SHARING	Both	Silicon Gel	Not relevant	helmet compartment
		Lithium		
CHARGING IN OWN DESTINATION	Not relevant	Lead; Lead Gel	YES	
		Silicon Gel		
		Lithium	D C V	25/11/2015





OPERATIVE PLAN:

what is to be done and when for model implementation

CREATION OF THE ELEMENTS IN ORDER
TO IMPLEMENT SERVICES

EXPERIMENTATION START UP EXPERIMENTATION MONITORING

1. TECHNICAL

REPORT

MONITORING

STAKEHOLDER INVOLVEMENT

- 1. AGREEMENTS
 - approval of schemes/models
 - signature
- PROMOTION/ COMMUNICATION
 - links on web
 - website
- etc...
- 2. EVENT

PARTICIPATION

- initiatives
- meetings
- etc...

- 2. INCENTIVES/ FACILITATIONS
 - Municipality Decision
 - Implementation
- 3. APP AND GIS TOOLS
 - requirements
 - start up
 - customization







Hypothesis: duration of analysis and experimentation 18
MONTHS

CREATION OF ELEMENTS FOR IMPLEMENTATION

	months	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
	stakeholder involvement											I		 						
MENT	approval of schemes/models																			
AGREEMENT	agreement signature by stakeholders																			
NOI	individuation of actions										İ		İ		0	THER	ACILI	ATIO	15?	
FACILITATION	Municipality Decision														0	THER	ACILI [*]	ATIO	IS?	
FACII	Start up																			
T00L	GIS requirement and function individuation																			
AND GIS	App requirement and function individuation																			
APP A	Demo version start up of GiS platform and app																			

COMMUNICATION

ANALYSIS AND PREPARATION

IMPLEMENTATION

IT'S NECESSARY TO DO ACTIONS

IT'S POSSIBLE TO DO FURTHER ACTIONS IN ORDER TO STRENGTHEN THE PROJECT







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2 EXPERIMENTATION START UP

	months	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
	Test experimentations																			
NOI	website updating																			
ON AND	Preparation and sending of documentation for MM																			
	Promo material preparation and printing																			
ROMOT NT PAR	Promotion for schools																			
PRO	Other dissemination events																			

COMMUNICATION IT'S NECESSARY TO DO ACTIONS
IMPLEMENTATION IT'S POSSIBLE TO DO FURTHER ACTIONS
IN ORDER TO STRENGHTEN THE PROJECT





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EXPERIMENTATION MONITORING

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Test experimentations																		
Preparation and sending of documentation for MM																		
monitoring indicator creation for evaluation pr.																		
Service reporting																		

		IT'S NECESSARY TO DO ACTIONS
IMPLEM	ENTATION	IT'S POSSIBLE TO DO FURTHER ACTIONS IN
		ORDER TO STRENGHTEN THE PROJECT







ELE.C.TRA. KIT AT A GLANCE

"Ele.C.Tra kit" is the set of tools produced in the project for the replicability of the model. It is available for all possible subjects interested in the implementation of EV services in their own cities. It includes:



Deliverables: Model Executive planning Report Replication Plan with details about HOW, WHEN, WHO, WHAT to be done



Model of agreements with stakeholders (one per category)



Mailing lists of the supporter groups in all countries involved





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THANK YOU FOR YOUR KIND ATTENTION

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