



# BIKE GENERATION: HOW TO IMPROVE THE SUSTAINABLE MOBILITY IN THE CITY OF VALENCIA?

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### Challenge

Most of European cities have not been planned taking into account energy and environmental aspects that are essential to sustainable urban mobility. We propose some strategic changes in the transport system and adding new smart features built upon the already existing innovations in the city of Valencia.

- **How to reduce** the traffic congestion in the city?
- How to attract more people to enjoy every day a healthy and fun biking experience?
- **How to improve** the biking infrastructure while making the city greener and reducing heat stress and air pollution?

## Problem approach

Gamification using a bonus based system

**Transport + bike = Energy generator** 

Interconnected green bike lanes

GAMIFICATION

BIKE=Transport

+EnergyGen

B

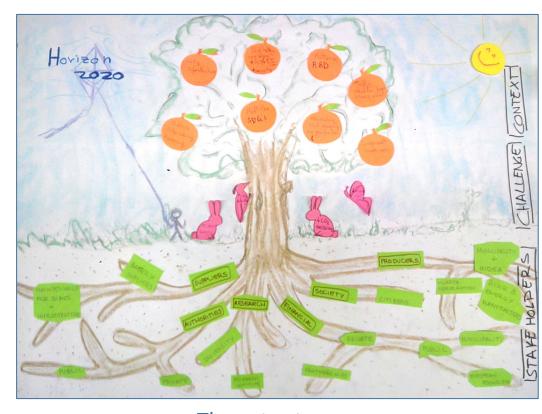
Bike Generation

Our joint solution

**Get rewarded for using the bike**. A virtual currency will be created that users could change for tickets to public transport, accesses to city centre, parking ORA, local shops, etc.

**Use the bike as energy generator** to a) charge the user's devices and b) supply energy to the grid. A removable battery element will be designed.

**Improve bike lanes**: a) New lanes in the city connecting important spots; b) more secure lanes and bike sheds (Innovative lighting system in the Túria) and c) Green corridors



The actor tree



Network of green bike lanes

We have been working with the tools "the pentagonal problem", "the actor tree", and "the context map" that are helpful to place our innovation in context, to specify the challenges we address and to identify the stakeholders. To facilitate the transformation of the mobility system in Valencia the most important stakeholders are the City Hall, InnDEA, the citizens, cycling organizations, the software developer for the virtual currency and R&D groups of universities and companies.

### We have learnt

- / Multi-professional teamwork is essential to create constructive and feasible ideas, but also to inspire each other with out-of-the-box ideas
- ✓ Sharing the best innovative practises that were proven at other places is useful when we want to turn an idea into practice, and adapt it to other cities

# July Begin Inndea Consultation Project development Final version



Project presentation: Pitch in the botanic garden. Valencia, July, 2016





