

Case #2

# The City of Modena

Understanding the Ecosystem

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|---------------------|--|
| <b>START DATE</b>   | 2015                                     |
| <b>LOCATION</b>     | Modena, Italy                            |
| <b>THEME</b>        | Urban Transitions                        |
| <b>LEAD CONTACT</b> | Claudia Carani,<br>Project Manager, AESS |
| <b>STAKEHOLDERS</b> | Private, Public & Third Sector           |





# Case Study Overview

The 'Open Innovation Process' can be explained through the development of multi-actor clusters involved in the Climate-KIC flagship project 'Transition Cities', initiated by the Sustainable Development Agency (AESS) in Modena, Italy, in 2015.

The Transition Cities project was created in partnership together with seven other cities and aiming to stimulate pilot studies and experiments in relation to three main areas of activity: buildings, energy and mobility. These three areas of activity were identified as they have the potential to significantly reduce carbon emissions within cities. The Transition Cities project aimed to: promote new start-ups; leverage EU funds; enable cities to explore new institutional and business models in order to maximise carbon reduction; and, disseminate its findings widely across major European networks<sup>[1]</sup>. Through the multi-actor clusters, the project supported cities in articulating their needs and identifying their sustainability challenges.

[1] Climate-KIC, Transition Cities, Project, [www.climate-kic.org/projects/transition-cities/](http://www.climate-kic.org/projects/transition-cities/) – Accessed December 2017

Within the City of Modena, the calls for proposals focused on identifying innovative services for sustainable mobility and the funding was allocated to the following<sup>[2]</sup>:

- The activation and management of the experimental electric car-sharing service that can be used by the City and the private citizens in the Municipality of Modena (€ 50,000), and;
- Installation of automatic traffic detection devices, for the purpose of obtaining data on flows and modal shift differentials on some urban axes in the municipality of Modena (€ 15,000);
- Developing a "SEO – Smart Energy Oracle" online platform to monitor energy investments in public assets (€ 15,000).

The proposal call was intentionally open to all stakeholders within Modena, to boost a 'climate

[2] AESS Modena website, Climate-KIC, [www.aess-modena.it/en/projects/climate-kic.html](http://www.aess-modena.it/en/projects/climate-kic.html) – Accessed December 2017



innovation' approach in European cities and stimulate all stakeholders to contribute towards the transition to a sustainable society. Each proposal was appraised and the best ideas were selected by AESS and the City of Modena. Claudia Carani, the Project Manager at AESS explained the benefits of the 'Open Innovation Process' for Modena:

*'... Gaining insight into the different methodologies used to facilitate the process and acquiring knowledge about the city's ecosystem were the two important key learnings ... so even though we acquired new solutions, it was not only about that'*

By adopting an open approach, Modena ensured greater public involvement, widened its economic base through the cultivation of entrepreneurs, start-ups and SMEs, and captured the most up-to-date knowledge, thinking, and competencies. Thus, the open innovation process, when managed well, can be used to provide solutions to problems that both the city and society deem important.

## Obtaining: Local stakeholders co-develop mobility solutions

Within the Transition Cities project, AESS utilised an open innovation approach and engaged the local community in the development of innovative solutions that responded to the needs of sustainable mobility for Modena. In early 2016, AESS facilitated a two-hour workshop and invited local stakeholders, from both the public and private sectors with experience in the field of mobility as well as local residents. All stakeholders were asked to identify the main sustainable mobility priorities for Modena in order to create both the context and opportunity for anyone to source, co-develop and scale-up city solutions.

The discussions and brainstorming with local experts provided valuable insight and knowledgeable feedback that the city would otherwise not have had access to had they not utilised this approach.

The outputs from the workshop were of particular value to Modena, as it enabled the city to select priority thematic areas for sustainable mobility that were locally relevant, namely: electric vehicles; smart mobility through traffic detection devices, and cycling. The best ideas from the workshop then contextualised the

*The stakeholders were asked to identify the main priorities for Modena with regards to sustainable mobility and the feedback provided the city with valuable input*

'calls for contributions' for the development of innovative projects for the city. Stakeholders could then collaborate in multi-actor clusters, to source, co-develop and test innovative products or services within the priority thematic areas and thereafter apply for funding to test ideas.

The 'Open Innovation Process' requires multi-actor clusters to collaborate to reduce the likelihood of single stakeholders developing isolated initiatives that lack strategic coherence and do not have an agreed perspective on where to focus investment and scale up. Carani reflected on the open approach, and suggested that it is necessary to:

*'[Firstly] Engage a good mix of stakeholders with different backgrounds and positions in the community that could bring different perspectives in the working group, and [secondly] To provide an effective facilitation in order to achieve results in maximum of two hours.'*

AESS effectively facilitated the workshop by planning, guiding and managing the discussions

between stakeholders in order to define clear objectives, actively participate in discussions, contribute new ideas and agree on solutions (e.g., getting 'buy-in' from each actor).

### Integrating: Insights for Modena

In August 2016, AESS contextualised all the innovative ideas that arose from the facilitated workshop, summarising and published the findings as a consultation document for a public call for sustainable mobility solutions. The City of Modena received a number of multi-actor cluster proposals that not only provided further insight into local stakeholders' specific expertise and knowledge, detailed experiments and potential pilot studies but also provided a comprehensive list of stakeholders interested in being part of the 'Open Innovation' process, thus paving way for potential future collaboration.

### Implementing: Catalysing sustainable mobility solutions

Following the facilitated workshop and the calls for contributions for the development of innovative projects for the city in August 2016, the winning proposals were selected and the results published on the City of Modena website the following September 2016.

The City of Modena selected four proposals, each of them presented new, innovative pathways for the city to meet its aims and objectives for sustainable mobility as set out in the municipalities own mobility strategy, as Carani explains:

*'The bottom-up approach ensured the suggestions presented were aligned with the City's Sustainable Mobility Vision and Strategy and even if the City of Modena didn't co-finance the selected projects, the engagement was very high.'*

The following proposals were successful<sup>[3]</sup>:

- Electric Vehicles: The creation of a car-sharing scheme using electric vehicles in the city.
- Smart mobility: The development of sensors and apps that survey and analyse traffic modes and routes for the city, which reduce congestion and air pollution and freight systems.
- Cycling initiatives:
- WeCity 2.0: the integration of an existing bicycle app that is combined with crowd data coming from the bikers using the road network of the city (cycle ways and safety cycle ways)
- eGoBike: the development of a new bike rental service for tourists, bike delivery to hotels and tourist point, and bike tour in the province of Modena
- Mobile Bike Repair shop: the creation of a mobile shop that provide assistance to repair bicycles and provide information

Both Climate-KIC and the City of Modena supported the successful proposals by: guiding the new entrepreneurs; exploring new business models for carbon reduction; disseminating information and findings across major European networks; providing expertise; leveraging European funding and in some instances part-financing projects; providing spaces within the city for pilot testing, and, linking up and synergising with other projects in the region (e.g., Bologna, Italy).

[3] Climate-KIC Italy, [www.climatekicemiliaromagna.it/innovation-pathfinder/projects/transition-cities](http://www.climatekicemiliaromagna.it/innovation-pathfinder/projects/transition-cities) – Accessed December 2017

## Case Study Summary

The Transition Cities project utilised an open approach that promoted experimentation and pilot studies to enable cities to address gaps in provision; deepen their understanding and enabled maximisation of their potential, both in terms of learning from individual projects and then sharing that knowledge and experience with similar cities. The process is explained below:

### Challenges:

The Open Innovation process isn't without its challenges, especially when working with a large consortium: it can be difficult to manage all stakeholders involved as they are all driven by a desire to create different forms of value. AESS identified this and acted as 'match makers' as well as engaging local stakeholders in both the priority theme selection and the consultation call. AESS supported the process by acting as brokers between stakeholders involved in the collaboration. Multi-actor clusters ensured that the open approach was inclusive to all local stakeholders from start to finish and AESS played a key role in keeping the overall process in motion.

### Results:

The project lead, AESS, collaborated with the City of Modena and Climate-KIC to seed fund the successful proposals in order to boost wider investments. This has resulted in:

- The launch of an Electric Vehicle (EV) sharing scheme in Modena that was funded using a public-private investment model. The project provided 56 EVs for the City of Modena, saving an estimated 158,600 tonnes CO<sub>2</sub> emissions every year.
- The Smart Mobility app enabled data analysis of different traffic modes and routes in Modena City Centre using innovative means (sensors and applications) – this data has fed into the local sustainable mobility plan.
- The cycling initiatives improved access to bikes to encourage locals and tourists to use sustainable modes of transport.

For Modena, the process of Open Innovation represented a new approach where the city could work with local stakeholders to identify key transport priorities for the area and then source and co-develop solutions to sustainability challenges.

