

# Innovations in urban transport

## Emergence

Studying a limited number of emerging and promising low energy innovations with the aim of better understanding the mechanisms and processes involved and conditions for success



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**Transport is widely seen as a sector in which it is very difficult to reduce greenhouse gas emissions and energy consumption. Nonetheless, efforts to do so by governments, corporate actors and civic society have increased markedly since 2000.**

Urban transport has often been the focal point of these initiatives and in keeping with the localism agenda city-level authorities are often expected to play a facilitating and coordinating role in the emergence and evolution of low-energy innovations in transport. Not all urban areas have, however, seen the same extent and diversity in low-energy innovation processes and there are also important differences within such areas.

## Research aim and questions

The project seeks to identify factors and processes that explain differences between and within urban areas in the emergence and development of low-energy innovations. It also seeks to understand the extent to which those factors and processes are transferable across urban areas.

## Methodology

The focus is on a wide range of innovations, from car sharing to hydrogen vehicles and bike maintenance/repair activities and facilities. Document analysis, in-depth interviews and focus groups are employed to case studies focused on London, Merseyside, Brighton & Hove, and Oxford.

## Outputs

Two papers have been completed to date and various conference presentations and key notes have been given. A number of additional papers are foreseen for the next year.



## Early findings

- Many different low-energy innovations in urban transport can be identified in the four case study areas but there are important differences between and within each of the cities.
- The early development of niche innovations depends to a strong degree on support (regulation, finance) by incumbent actors. New entrants often struggle to move beyond the start-up phase.
- In contradistinction to discourses of localism and empowerment of cities, the capacity of local government to support low-energy innovations is to a considerable degree configured elsewhere. Local governments often depend on national level, and to some extent EU (FP7, H2020) level, funding to be acquired through bidding processes. This complicates and limits opportunities to offer long-term support.

## Engagement and impact

The project engages with a wide range of stakeholders in the four case study areas. It also intends to engage with national level actors, such as the Department for Transport (DfT) and Carplus (an accreditation and research agency focused on car sharing). The team have also responded to a 'Call for evidence on Government measures to support uptake of ultra low emission vehicles' by the Office for Low Emission vehicles (OLEV) in January 2014.



CIED is a collaboration between researchers from the Sussex Energy Group (SEG) at SPRU, University of Sussex; the Transport Studies Unit (TSU) at the University of Oxford; and the Sustainable Consumption Institute (SCI) at the University of Manchester and is one of six Research Centres on End Use Energy Demand funded by the RCUK Energy Programme.

**Emergence. Diffusion. Impacts.**