

## Details

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## Brief Overview Project

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**CP - Call: FP7-TRANSPORT-2013-MOVE-1**

**GC.SST.2013-4. Demonstration of electric buses as urban public transport**

**Project Idea** – Electric Bus in Real Life Urban Driving Conditions using different powertrains from PHEV to BEV on a complete route.

- Demonstration EV urban buses in a wide range of real-life operating conditions.
- Focus should be on vehicles with interaction with the grids.
- Demonstrate various climatic and geographical conditions.
- Assess infrastructure optimisation and bus-to-grid interaction scenarios.
- Develop standards, investigate of safety issues.
- Validate technology (i.e. performance, durability and costs).
- Assess impact on energy and environment, including a well-to-wheels analysis.
- Communication, dissemination of information, and education.

# Project Consortia

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## Tentative Partners:

- Wrightbus – Manufacturer of Buses including Hybrid powertrains
- Queens – Academic Partner, R&D
- Translink – Public transport operator Northern Ireland
- Belfast City Council – Local Authority
- Th!nksmart Technology – SME, focus optimisation

## Additional Partners Required:

- Geographical dispersed across EU – in order to test battery/powertrain performance under different grid and climatic conditions
- Utilities
- Other equipment manufacturers
- Other academics
- Other local authorities
- SME in working in related topics
- To form a network of at least four cities to undertake a comparative study

## QUB Expertise

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- Turbomachinery
- Alternative fuel vehicles
- Hybrid vehicles
- Electric vehicles powertrains
- Internal combustion engines
- Well-to-wheel analysis
- Electric vehicle modelling (i.e. energy and emissions analysis)
- Electric vehicle grid integration and market integration
- Batteries
- Power systems