The problem
The diffusion of electric vehicles is today the most promising opportunity for changing our energy sources and thus ending the dependency on fossil fuels in the mobility sector. More generally, it is an important leverage for the transition to a more sustainable society. In the last few years technology made huge progresses: with reference to the Ticino Canton the electric car could cover more than 80% of personal mobility requirements. In spite of such a potential for the substitution of traditional vehicles, electric vehicles penetration is still hindered by infrastructural and behavioural barriers.

The project
e-mobiliTI aims at:
• investigating the opportunities for the penetration of individual electric mobility in the Ticino Canton;
• identifying the socio-cultural and infrastructural factors to support the transition to new mobility models;
• exploring new technologies for data collection and analysis.

A sample of families in the Lugano area will be monitored in all their trips and will test new ways of mobility: electric bicycles and cars, car and bikesharing, public means of transport. In order to deeply investigate reasons for the trips and the choices of the means of transport, e-mobiliTI will rely on both automatic data-gathering techniques and qualitative discussion in working groups.

The result
Elements gathered during the testing phase will allow to identify the socio-cultural and infrastructural factors that can be exploited to favour the transition to new mobility models in the Ticino Canton. The project will therefore produce a set of guidelines that will be made available to the Cantonal and Municipal authorities and to the sector operators for direct implementation. e-mobiliTI started in May 2012 and will last for 24 months. Preliminary intermediate results are expected by summer 2013, at the end of the monitoring activities of the present mobility habits of the sample families.

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Partners
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Research domains
A2. Civil, industrial and urban energy systems
A5. Intelligent systems for knowledge and communication