

Energy and Mobility Laboratory (EMob-Lab)

The Energy and Mobility Laboratory (EMob-Lab) is a Joint Research Unit which is placed under the supervision of University Gustave Eiffel and ENTPE. It is located on on both the ENTPE Campus and the University Gustave Eiffel Bron Campus in Lyon.

The main research themes of the laboratory concern the Dynamic Modelling, Monitoring and Control of Mobility Networks as well as New Vehicles and New Components Usage, Ageing and Control.

Such research scope covers high-challenging issues (environmental impact of mobility, intelligent transport systems, multimodality and intermodality), which are tackled according to an “integrated” approach that brings together complementary scientific skills.

The laboratory is also working on the development of innovative tools for **intelligent mobility**, studying the **impact of new mobility services** (car sharing, mobility on demand) and ways to improve the **resilience of transport systems.**

Finally, the laboratory is interested in the study of mobility patterns and user behavior via techniques derived from **artificial intelligence** (big data, statistical learning, etc.).

The models developed by the LICIT provide concrete decision support and contribute to the development of tools for **sustainable traffic management**.

As an applied research laboratory, the LICIT places itself at the interface between the physical and digital worlds with a strong experimental basis: the knowledge produced is then validated experimentally from operational data.

Thus, LICIT pays particular attention to the comparison of data and models, which requires experimental activity and the strong support of experimental platforms and living labs.