# SIMULATING URBAN LOGISTICS IN ITS ECONOMIC AND SPATIAL ENVIRONMENT (SILOGUES)

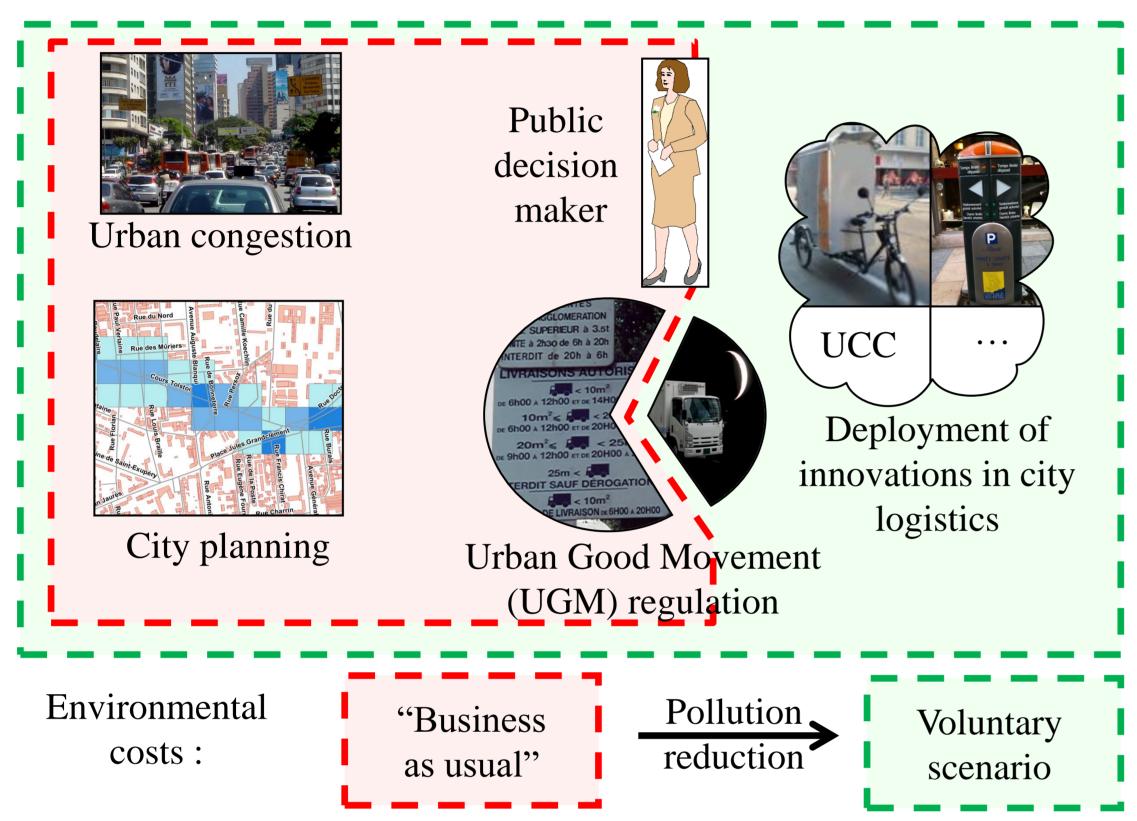
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### Introduction

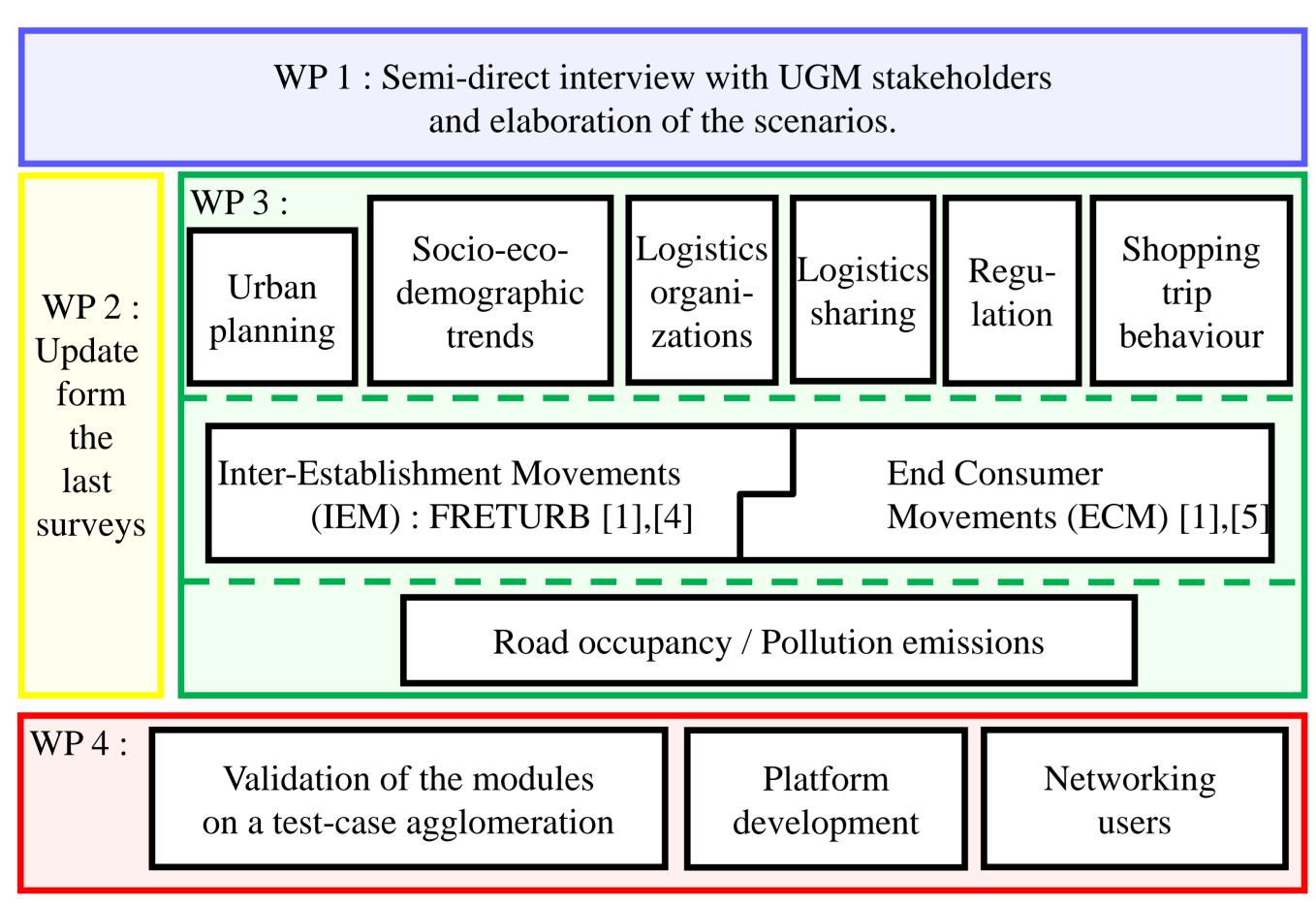
Nowadays, city planners need to make integrated plans including land-use (buildings, linear infrastructures), transport (both of people and freight), urban policies, etc. The SILOGUES project (2012-2015) is a French National Research Program on Land Transport (Predit) project which aims to provide a decision support framework to simulate the impacts of urban policies on goods transport. The physical scope is that of the entire urban area, and the stakeholders targeted in priority public authorities and technical services.



Needs of simulation to integrate goods to urban planning

# Methodology

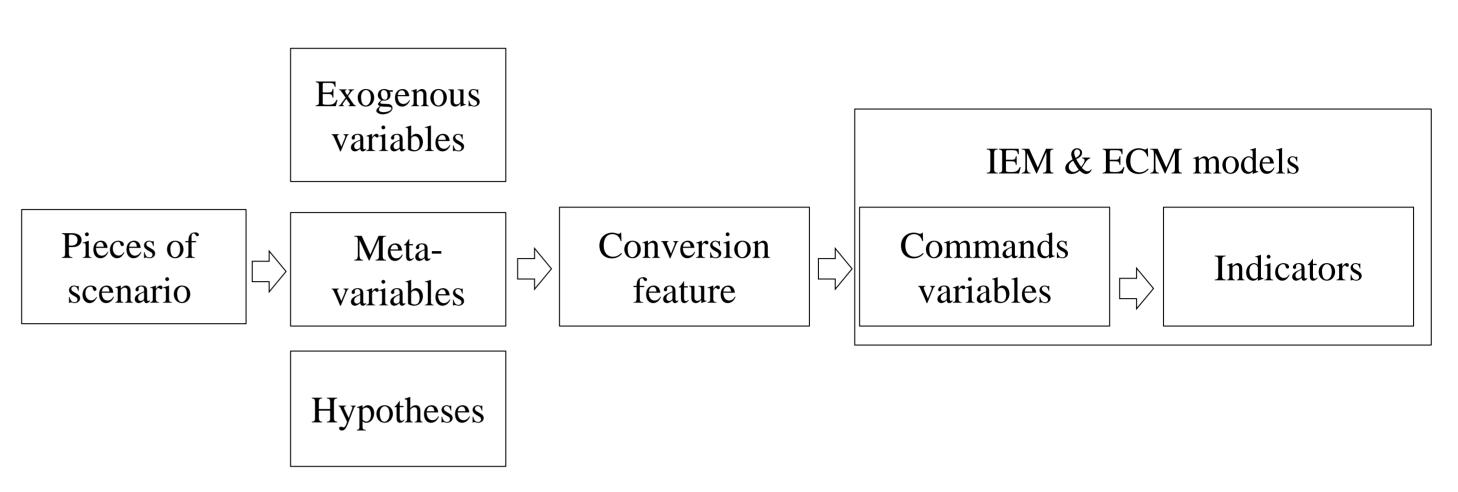
The main aim of the SILOGUES project is to provide a simulation platform to assess middle-future scenarios of urban goods transport policy deployment. To do this, the SILOGUES platform follows a modular configuration that allows to exchange and construct the necessary information to build then simulate the proposed scenarios.



#### Work program

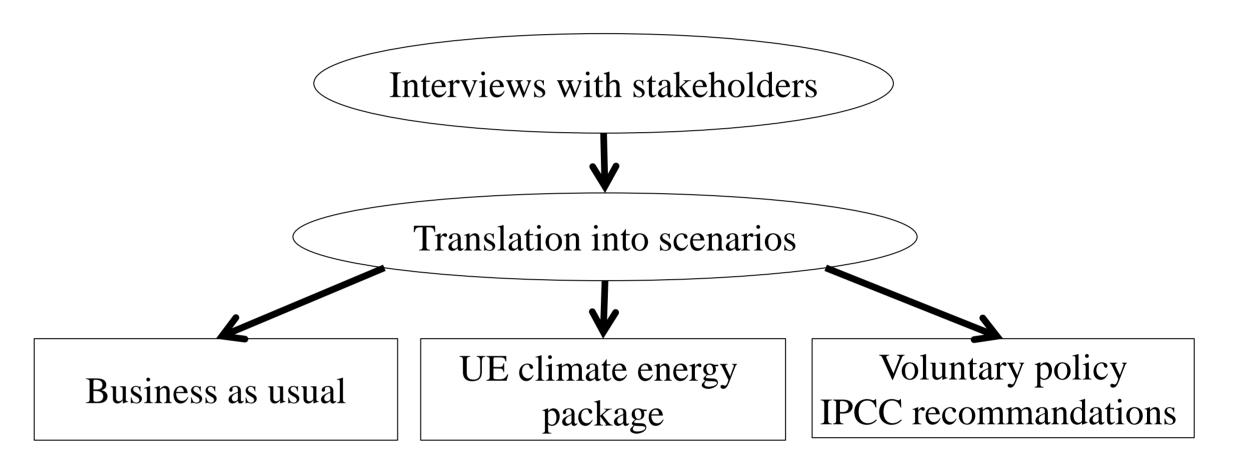
- WP1 is devoted to the construction of a set of relevant long term scenarios.
- WP2 is to adapt the FRETURB model to wider range of cities and to recent data
- WP3 is the heart of the SILOGUES project. Its purpose is to develop the interacting modules to simulate the proposed scenarios.
- WP4 deals with the validation of all modules, toward a fully operational platform.

## Advancement and first results



#### **Key concepts of the SILOGUES platform**

The preliminary work to progress towards a fully cohesive platform has been achieved. It summarizes the key concepts through which each module of the WP3 interacts one with the other.

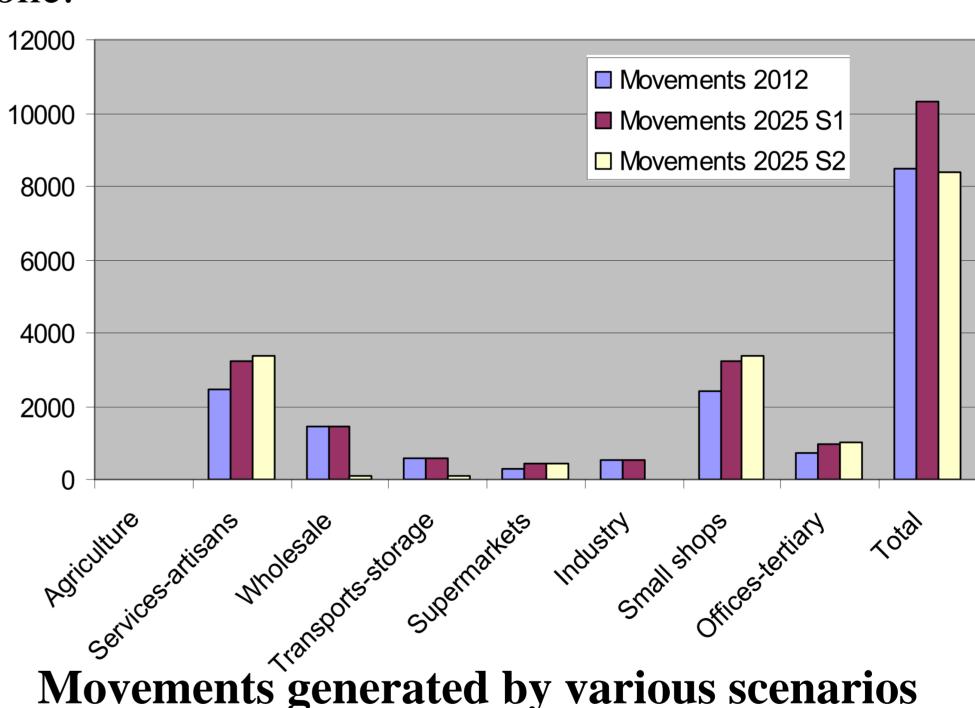


**Building of UGM scenarios** 

The interviews revealed that the stakeholders most of the time have a good short term vision in their specific activity. Nevertheless, they are missing a long term global vision [2].

Examples of scenarios generated by simulating urban activities [3]:

- Scenario S1: maintaining existing activities (including wholesale and industry) plus additional activities due to the growth of the zone.
- Scenario S2: Replacing the remaining wholesale, transport and industry, by shops and tertiary offices taking into account the growth of the zone.



## Main references

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- 2.Gerardin B. (2013) Research report SILOGUES project.
- 3.Gardrat M. (2012) Simulating urban activities for decision making and freight modelling: the Simetab model. 8th International Conference on City Logistics. Bali, Indonesia.
- 4.Routhier J.-L., Toilier F. (2014) FRETurb v3.0 Diagnostics and simulation software for urban freight transport. *Transport Research Arena*. Paris, France.
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