



## Key Facts and Research gap

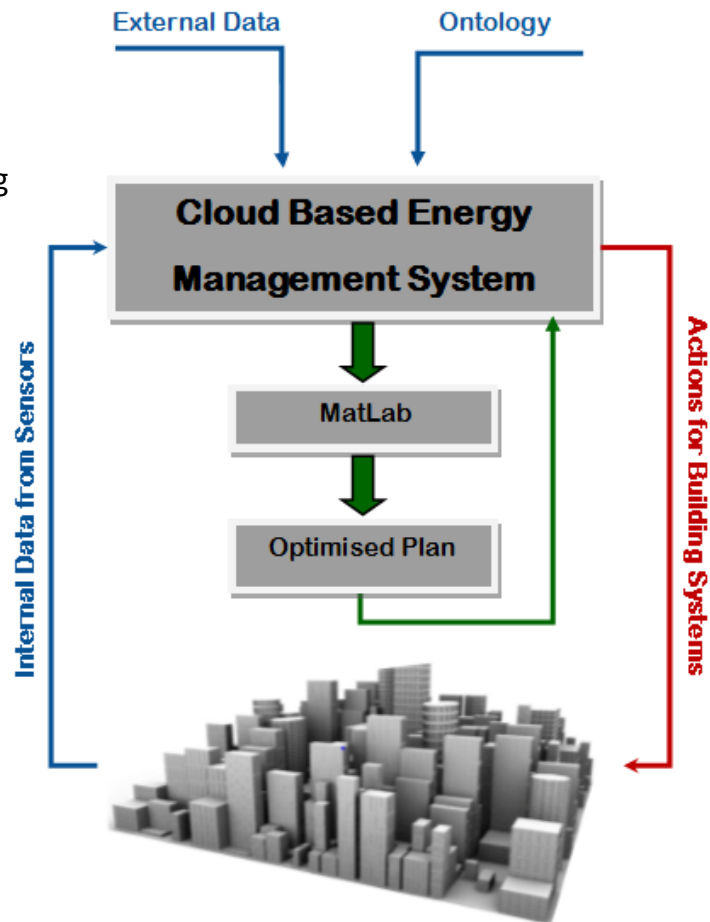
- Buildings are responsible for 36 % of EU CO2 emissions
- Increasing concern over the margin between peak demand and supply capacity

## Research Aim:

- To deliver a smart energy management capability on the cloud
- To interface with BMS of a block of buildings within a district
- Reduce the gap between predicted and real energy consumption

## Research Activities

- Define a set of energy performance indicators
- Establish cost effective methodologies to capture energy data to characterize building behavior
- Design an approach to predict energy demand for a single or group of buildings
- Assess the performance gap between predicted performance and real performance
- Develop an interface to integrate with the SCADA based BMS
- Create a simulation tool that can factor in real time changes in the internal and external environment
- Develop an optimisation plan from the real time data
- Test and validate the developed energy management tool



## Research outputs

- A Cloud based energy management software