

The logo for ESO F 2018 Toulouse is a large red hexagon with the text "ESOF" in white, "2018" in grey, and "TOULOUSE" in white. It is surrounded by several smaller hexagons of various colors (blue, yellow, purple, pink) containing icons representing smart city themes like networks, atoms, and people. A red network icon is also shown separately.

ESOF 2018 TOULOUSE

Look around: tomorrows
smart cities are being
planned and delivered
today

Zita Vale
Polytechnic of Porto, Portugal

#ESOF2018

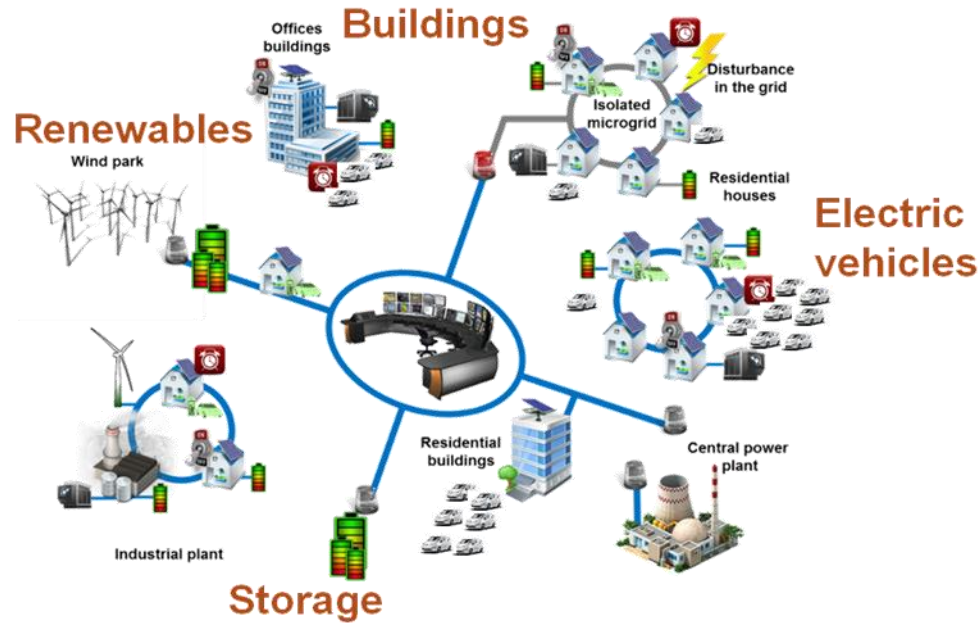


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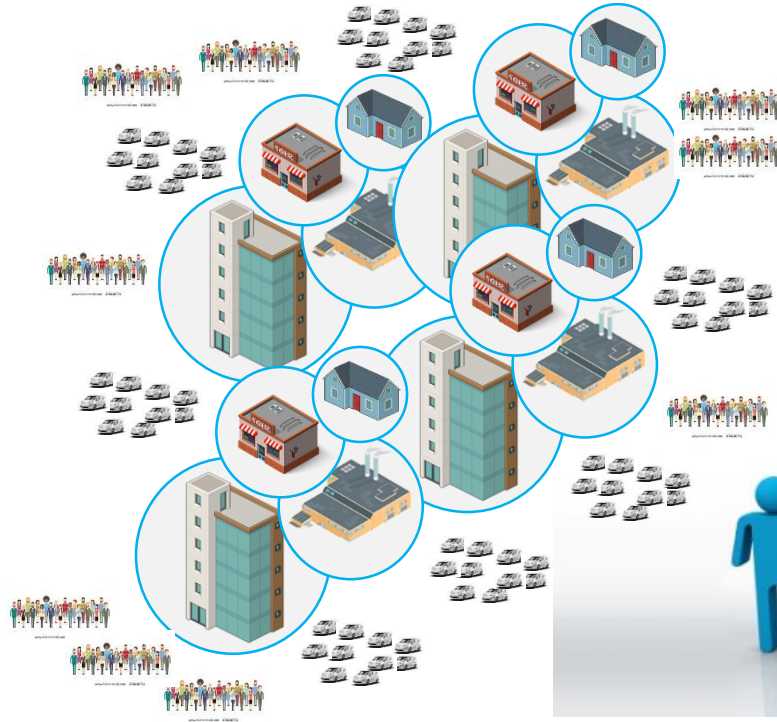
ESOF.eu

Energy in the era of smart grids & microgrids



- Sustainable energy systems
 - Energy
 - Environment
 - Economy

Energy in the era of smart grids & microgrids



- People
 - Citizens (smart cities)
 - Customers (retailers)
 - Consumers (utilities)
 - ...
- Demand flexibility
- Demand response



Energy in the era of smart grids & microgrids

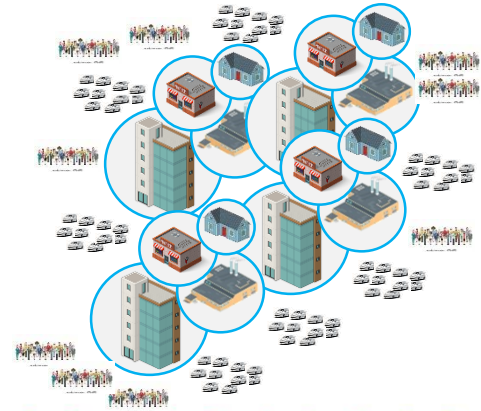
Resources and their owners/managers are connected

- Aggregation
- Third-party resources use
- Energy/resource sharing
- Transactions among neighbours



New forms of energy markets

- Local energy markets
- Smart energy communities

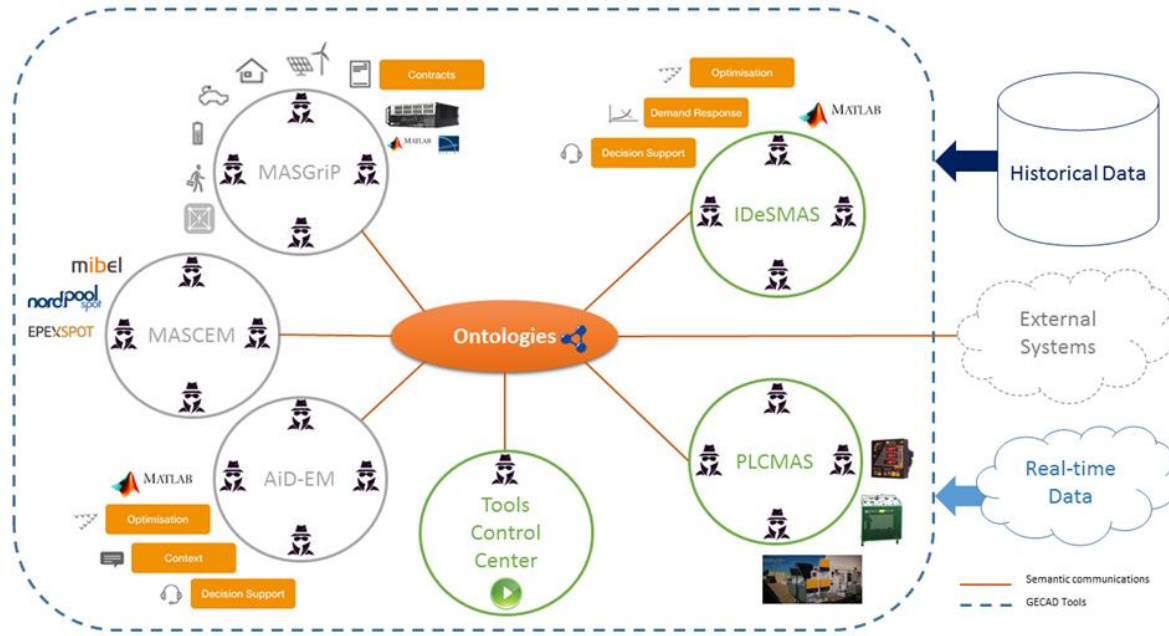


DREAM-GO approaches and contributions

- Reduce costs
 - Ensure added value
 - Share value
- How?
- 
- Realistic business models to be used in practice
 - Short and real-time demand response
 - Demand response contracts
 - Remuneration and Tariffs

The logo for DREAM-GO, with 'DREAM' in blue and 'GO' in green, separated by a stylized white line.

DREAM-GO approaches and contributions



AiD-EM - Adaptive Decision Support for Electricity Markets negotiations

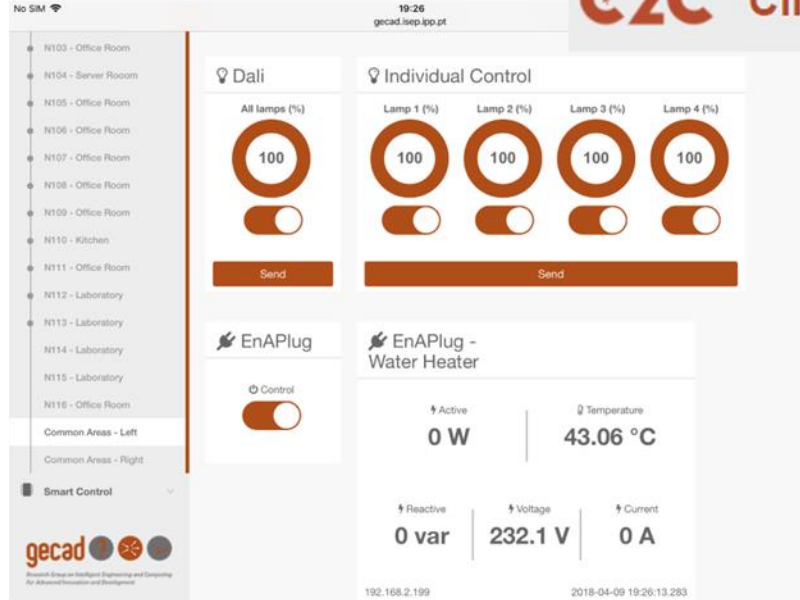
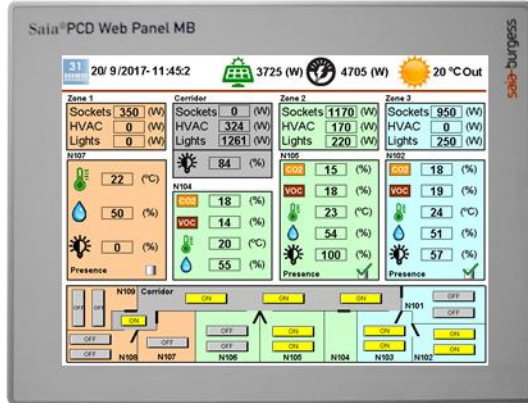
MASCEM - Multi-Agent Simulator of Competitive Electricity Markets

MASGrIP - Multi-Agent Smart Grid Platform

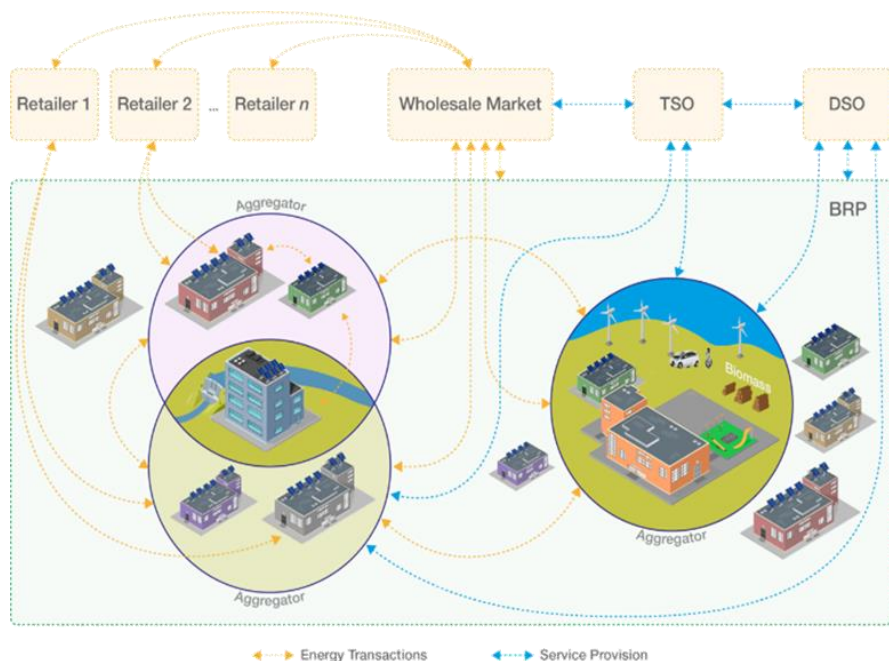
IDeSMAS - Intelligence and Decision Support Multi-Agent System

PLCMAS - Programmable Logic Control Multi-Agent System

Proof of concept and living demos



From Smart Grids to Smart Cities



Building blocks for Smart Cities

- Building smart grids with a bottom up approach
- Enabling energy awareness
- Smart energy communities
- Local markets

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ESOF
2018
TOULOUSE

EUROSCIENCE OPEN FORUM

SHARING SCIENCE:
TOWARDS NEW HORIZONS

9-14 JULY 2018
TOULOUSE, FRANCE

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