

Smart Campus Project

Partnership on Sustainable Buildings

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AGRI-FOOD



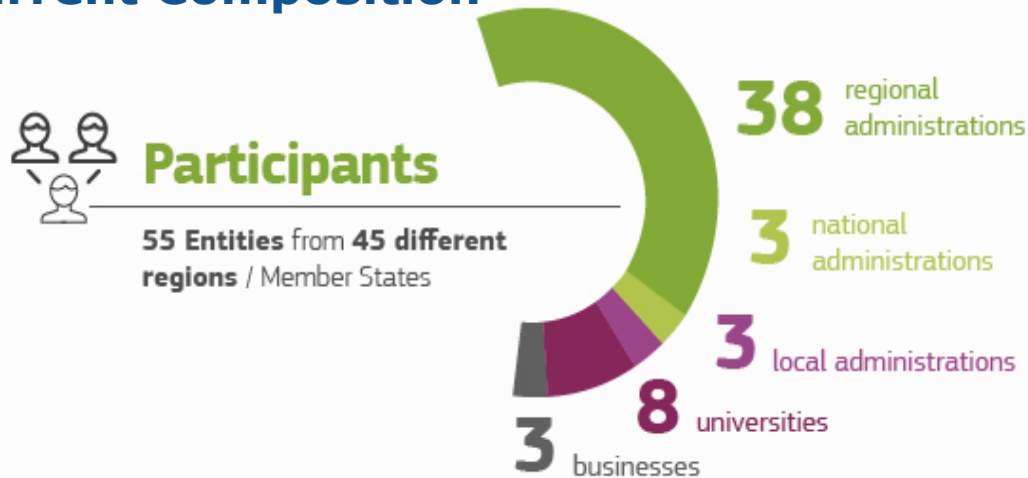
ENERGY



INDUSTRIAL
MODERNISATION

Introduction to the Partnership

Current Composition



Priority áreas (Pas)



Eco-construction, bioclimatism and insulation of buildings



Renewable energy integration in buildings



Systems of maximum energy efficiency in buildings and cities



Leaders

Led by the regions of **Andalusia (ES)** and **North Great Plain (HU)**, the Sustainable Buildings partnership engages the participation of

45

REGIONS AND MEMBER STATES



Share responsibilities of partnership

Topic	Coordinator
Leader	Andalusian Energy Agency, Spain
Co - Leader	LENERG (Hungary) and REGEA (Croatia)
Eco construction, bioclimatism and insulation of buildings	Lapland Region, Finland
Renewable energy integration in buildings	Confirmed new Regione Friuli Venezia Giulia
Systems of maximum energy efficiency use in buildings and cities	Confirmed IVE Valencia Institute of Building and TECES cluster Slovenia

Partnership collaboration business offers

New Technologies concerning NZEB applied to public buildings



Creating a Living Lab-based laboratory to foster energy-efficiency and energy-sufficiency of large panel building systems

Low carbon wood robust construction



Opening of collaboration business offers

Implementing the first pilot project: Smart Campus project

Smart Campus Project

One of the eight projects selected under call launched by EC to pilot interregional innovation projects

Objective: improve the energy efficiency of University Campuses

Regions involved:

1. Andalusian, LR (Spain)
2. Friuli Venezia Giulia Region, SC (Italy)
3. Central Slovenia - Osrednjeslovenska (Slovenia)
4. South Karelia (Finland)
5. Provence-Alpes-Côte-d'Azur (France)
6. Algarve Region (Portugal)

Support from EU: advice for scale-up and commercialization



Smart Campus Project - Partners

1. University of Trieste (Italy)
2. University of Udine (Italy)
3. University of Ljubliana (Slovenia)
4. University of Malaga (Spain)
5. Lappeenranta University of Technology (Finland)
6. University of Algarve (Portugal)



1. Directorate of the Energy Service - **RAFVG** (Italy)
2. Andalusian Energy Agency - **AAE** (Spain)
3. Lappeenranta City - **LAP** (Finland)
4. Energy Directorate - **SED** (Slovenia)
5. Agence des villes et territoires méditerranéens durables - **AVITEM** (France)
6. Areal Regional Energy and Environmental Agency - **AREEA** (Portugal)

1. **ABB SpA** - *industrial supplier*
2. **Blue Energy Group SpA** (Italy) - *energy trader*
3. **OverIT** (Italy) - *ICT for energy enterprises*
4. **Technological Corporation of Andalusia** (Spain) - *PPP*
5. **Green Energy Showroom**, *cluster* (Finland)
6. **Iskraemeco** - *energy collector* (Slovenia)
7. **GEN-I** - *energy supplier* (Slovenia)
8. **Enercoutim**, Alcoutim Solar Energy- *association* (Portugal)

1. **Academic** :students, professors and staff from the related campus.
2. **AEIT** (Italian Association of Electrical, Telecommunication, Automation and Computer Engineers) - *Network of stakeholders, FVG Section* (Italy)
3. **REDEJA** - *Energy Management Network of the Andalusian Regional Government* (Spain)
4. Responsible for **maintenance of public buildings** in the regions involved.

Smart Campus Project - WPs



Eco-construction, bioclimatism and insulation of buildings



Renewable energy integration in buildings



Systems of maximum **energy efficiency** in buildings and cities

WP1: Smartness of University Campuses



- **Survey** among University Campuses
- **Survey** among Industrial Stakeholders

WP2: Interregional Innovative Pilot Cases



- **Business Plan** of selected Pilot Cases
- **Technical and legislative solutions** to Pilot Cases bottlenecks
- **Blending of funds** to support the Pilot Cases realization

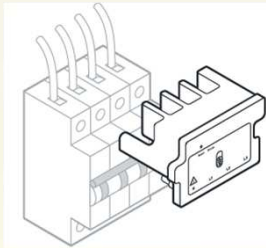
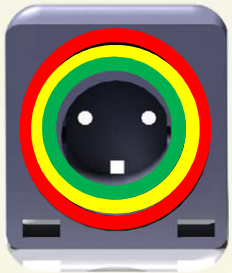
WP3: Definition of Smart Campus requirements



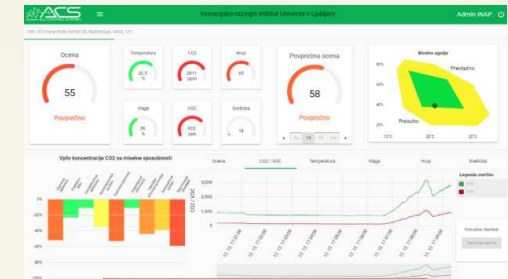
- **Policy dialogue** among Regions
- **University Buildings Energy Efficiency Roadmap** for the Development of Smart Campuses

Smart Campus Project – Expected Results

Solution 1. Energy Management System.
Intelligent control management of electrical energy consumption by smart plugs
(University of Malaga)



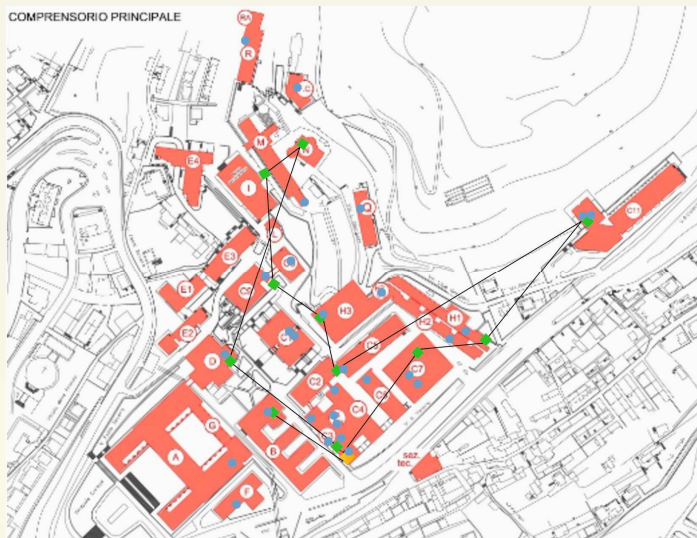
Solution 2. Indoor Quality. Smart Fancoil and Indoor Quality through IoT system (FVG & Slovenia)



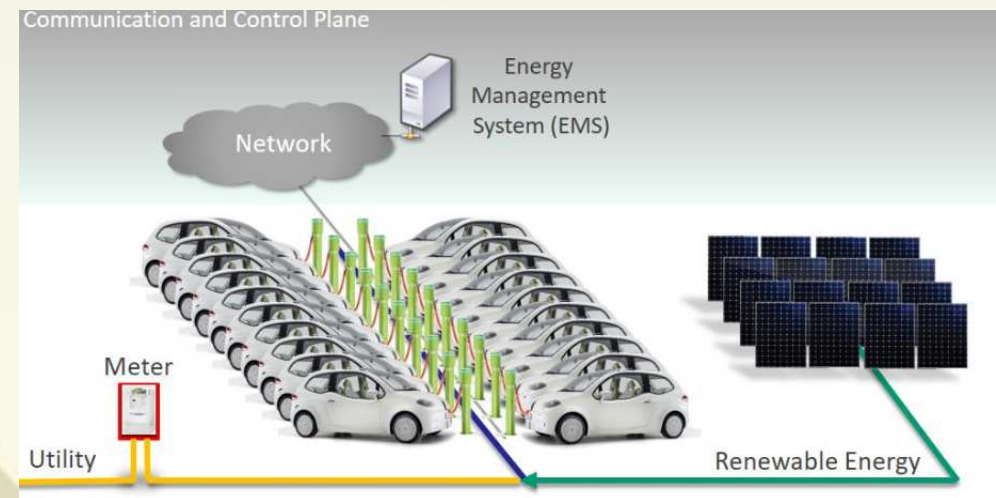
Benchmark: Green Campus System (LUT) and Algarve

Smart Campus Project – Expected Results

Solution 3. Smart grids. Real-time control and monitoring of electrical distribution grid (University of Udine)



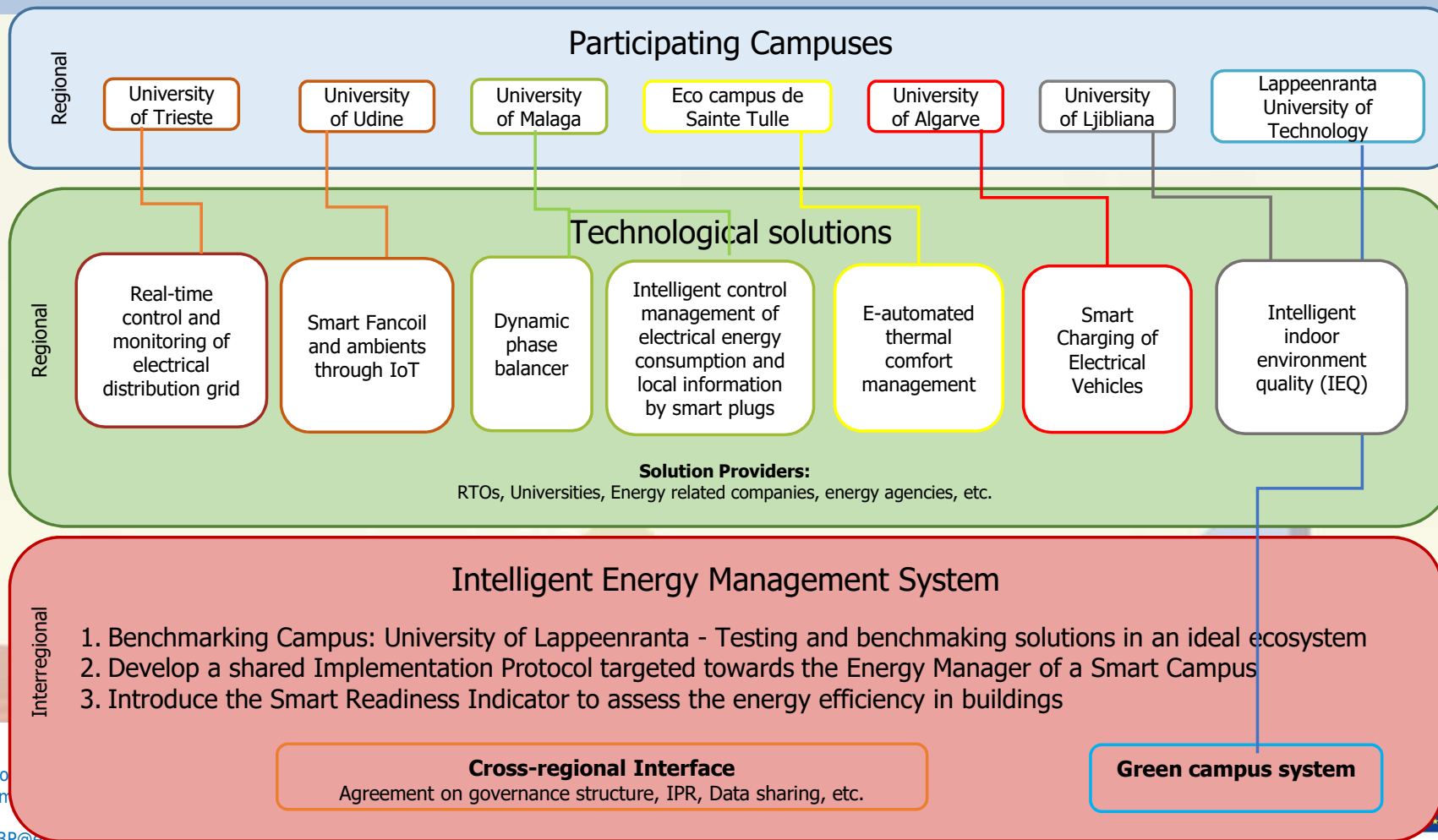
Solution 4. Mobility. Smart Charging of Electrical Vehicles (University of Algarve)



Smart Campus Project – Expected Results

Smart Campus Platform

Smart Campus Platform



Smart Campus Project – Additional Results

1. Benchmarking of existing solutions

2. Energy Data Sharing

3. Network of Smart Campuses

4. Jointly public procurement procedures

S3PEnergy Partnerships

Partnerships on Sustainable Buildings

more info:

<http://s3platform.jrc.ec.europa.eu/sustainable-buildings>

Partnership on Sustainable Buildings

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