Vilawatt, an innovative public-private-citizen partnership for local energy governance
What is UIA

Urban Innovative Actions (UIA)
European Regional Development Fund (ERDF - FEDER)

Main objective
To test innovative solutions to the main urban challenges and see how these respond to the complexity of real life

Specific requirements
- New solutions bringing EU added value
- Never been implemented anywhere else in Europe
- To be developed within three years
- Urban challenges that can be relevant to other urban authorities in Europe

Strategic Assessment
- 40% Innovativeness
- 15% Partnership
- 15% Transferability
- 10% Measurability
The project

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Energy transition in Viladecans

- With an active role from the citizens, communities, companies and local administration.

- Energy management improvement and capitalization of the savings to boost the housing energy renovation.

- Promotion of the local economy, the education, the employment, the network neighborhood, the improvement of the city and the quality of citizens’ life. (Integrated approach on the three sustainability dimensions: environmental, economic and social).
Potential obstacles and resistance

Key change

1. Citizens’ ignorance related to energy management and indoor environmental quality.
   - To initiate a **learning process** by means of:
     - energy supply contracting
     - a more efficient use of appliances, facilities, businesses and housings.
     - building renovation projects

2. Lack of interest in the housing energy renovation
   - To create a **neighborhood movement** by means of:
     - an alternative local currency (economical improvement)
     - deep energy renovation of 3 residential buildings (increase of comfort and wellness)

3. The poor family finances don’t allow to fund the refurbishment
   - Capitalize the energy management savings
   - Develop an economically viable Public-private-citizens financial model
Management difficulties arising from the complexity of the refurbishment process (multiplicity of actors, lack of technical knowledge, administrative issues)

- Local energy operator for integrated management of energy supplies, services and deep energy renovation.
- One-stop administration office in the neighborhood.

Weak organization of neighbourhood communities

A New public-private-citizen structure:
- for deep energy renovation (residential)
- to accompany the community processes.

Rigidity of regulations and administrative structures

- Finding the legal, administrative and financial framework
- To adapt the institutional structure in coordination with the private sector and citizens.

Lack of experience of the Administration on deep energy building renovation

Building a lighthouse project with the participation of all stakeholders related to deep energy renovation.
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Innovative public-private-citizen partnership

The big picture

Private partners:
- LIMA Association
- Low Impact Mediterranean Architecture
- Ubiquat Technologies
- Cercle Gespromat
- EGM

Public partners:
- ICAEN - Energy Agency of Catalonia
- Urban Ecology Agency of Barcelona
- Viladecans municipality

Private stakeholders:
- Citizens
- Local business
- Local communities
- Associations
- Building companies
- Sponsors

Public stakeholders:
- Àrea Metropolitana de Barcelona - Metropolitan Area of Barcelona
- Generalitat de Catalunya - Catalan government

Stakeholders:
- Consortium
- Operators
- Currencies
- Energy services
- Energy investments
- Cash
- Incentives
- Business
- Local management
- Communities

Legal management
Communities
Communication
Operational management
Financial management
**Scenarios**

**ENERGY SAVINGS CONTRACTING**
- Services: Audits, Workshops, Guidance
- Energy Savings (KWH)
- Vilawatt (currency)

**NEW LOCAL ECONOMY**

**ENERGY PERFORMANCE CONTRACTING**
- Services: Project design, Administrative management
- Deep Energy Renovation
- Energy Savings (KWH)
- Vilawatt (currency)

**RETURN ON INVESTMENT**
Scope

- 45 ha
- 20,216 residents (30% of the local population)
- 8,026 housings (6203 build without energy efficiency regulation)
- Income level a 15% below the local mean
- 34 GWh (final energy consumption)
Thanks for your attention!!