



**Partnership of European Regions on Energy  
Efficiency in Buildings**

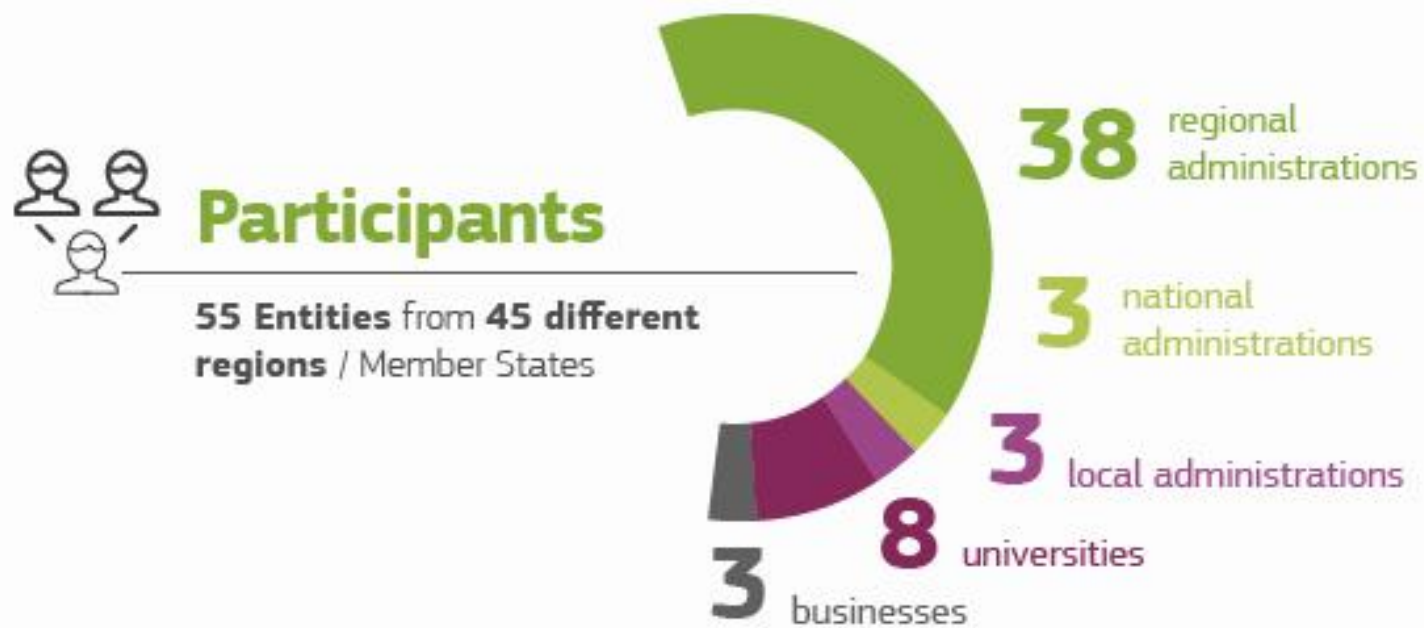
**Summary of Status of the Partnership on  
Sustainable Buildings AAE**

**Brussels, 24 January 2018**



# Current composition of the Partnership

Increasing number of entities interested (Denmark, Sweden, International entities etc)



**Review on the Partnership strategic documents**



**Participation in European events**

**Elaboration of a Map of capacities**



**Opening of collaboration business offers**



**Implementing the first pilot project: Smart Campus project**



## Review on the Partnership strategic documents



- Clearer description of the focus on pilot and demonstration projects (TRL 5-8)
- Clearer description of the added value of cross-regional collaboration
- Inclusion of Research and Technology Organisations (RTOs) in the regional scope of the governance
- **Definition of particular topics within each reference theme – 9 topics**

## Participation in European events

- Smart Regions 2.0 Conference, Helsinki 1-2 June 2017
- FEDARENE´ s General Assembly, Berlin 1-2 June 2017
- Partnership meeting in Hungary 6 July 2017
- How to accelerate innovation uptake for energy rehabilitation Conference, Sweden 12-13 September 2017
- Partnership Meeting , Brussels, 10 October 2017  
JRC’s central offices
- Innovation Camp, Brussels ,11-12 October 2017
- Partnership Meeting, Brussels, 22nd November 2017
- Partnership Meeting, Brussels, 24th January 2018



European Week | Brussels  
8-11 October 2018

04-08 JUNE 2018

**EU SUSTAINABLE ENERGY WEEK**  
LEAD THE CLEAN ENERGY TRANSITION



## Elaboration of a Map of capacities



Launching of a questionnaire for the identification of relevant actors on the level of particular topics within each reference theme

- Launched on 4<sup>th</sup> December 2017
- 16 surveys filled
- Still open on:  
<http://s3platform.jrc.ec.europa.eu/sustainable-buildings>

## Opening of collaboration business offers

Identification of collaboration offers and creation of working groups with the involvement of regional actors:

- 12 collaboration offers already identified.
- Still needed:
- Identification of other regions interested
  - Involvement of the regional actors
  - Creation of working groups



new COLLABORATION OFFER

FR  
AM  
E  
W  
O  
R  
K

Reference Theme: (please write your topic 1, 2 or 3)

Action Line:

Number of the collaboration offer: to be completed by the Andalusian Energy Agency)

Region from which the offer is made: (please specify Region/ Country):

Date of the collaboration offer:

Other related offers: to be complete by the Andalusian Energy Agency)

Name of the collaboration's offer (please maximum two lines):

Contact Data for the offer:

Regional entity/ies that promote this Action Line:



Figura 1 de 3



This document includes the fields of the descriptive data about of the collaboration projects of that will be developed within the partnership.

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COMPANY / ENTITY OFFERING THE COLLABORATION

In this section the company or entity preparing the collaboration's offer will present itself and the main outstanding elements in relation with the interregional collaboration's potential (previous experiences in interregional collaboration, outstanding products or services, current market for such products, ...)

DESCRIPTION OF THE PROJECT- Brief history of the project

The scope of the project will be outlined, briefly describing its main features, the current phase and the opportunities for collaboration that you want to take advantage of (the elements of the project will be listed as providing an opportunity for the development of interregional partnerships, including technological, social, regulatory issues, etc.)

CURRENT AND POTENTIAL MARKET

Description about the size and characteristics of the market, both in its current state and expected

COLLABORATION'S ADDED VALUE

Figura 2 de 3



## Implementing the first pilot project: Smart Campus project

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

Objective: to improve the energy efficiency of University Campus

### 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





## Activities in 2018

- **Complete the map of capacities**
- **Complete the Partnership tools**
- **Implementation of Smart Campus Project**
- **Creation of working groups for selected collaboration proposals**
- **Involvement of regional actors in the new collaboration proposals**
- **Implementation of new business cooperation initiatives and pilot projects**



## Partnership of European Regions on Energy Efficiency in Buildings

**New partners and ideas for pilot projects**

**Brussels, 24 January 2018**



## Project Ideas



### 1. Eco

construction,  
bioclimatism  
and insulation of  
buildings

#### Topic 1: New materials with low carbon footprint

- Applications of natural paints and coatings in exterior insulation systems or in ventilated facades - Andalusia

#### Topic 2: Innovative constructive processes: light prefabrication of low-cost housing, advanced manufacturing for new construction elements

- Efficient systems for the outer envelope and interior installations of industrialised construction – Andalusia

#### Topic 3: Bioclimatic solutions based on green bio elements (in roofs, facades etc.)



**Renewable energy**  
integration in  
buildings

**2. Renewable  
energy  
integration in  
buildings**

**Topic 1: Climatisation with renewable energies**

- Heat pumps fed from waste heat sources and seasonal thermal energy storage - Pomorskie

**Topic 2: Self-consumption and energy storage**

- Creating a Living Lab-based laboratory – Pomorskie

**Topic 3: Low cost solutions aimed at vulnerable groups**

- Maximizing social benefits of sustainable buildings for vulnerable groups- from Innovation's Camp





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



### 3. Systems of maximum energy efficiency use in buildings and cities

**Topic 1: Innovative solutions of high energy efficiency: evaporative cooling, LED lighting, microcogeneration....**

- Micro CHP (10-100 kw) to provide heat and electricity to housing and commercial in Pomorskie
- Efficient solutions in the rehabilitation of public secondary schools in Andalusia

**Topic 2: Smart energy management systems and IoT Internet of Things :**

- Smart Campus project
- Energy Certification by IVE
- IMPULSE-Management support tools for planning energy efficiency interventions in public buildings by IVE

**Topic 3: Advanced solutions for energy rehabilitation of historical heritage buildings**

- Rehabilitation of a historic building in Cadiz, Andalusia

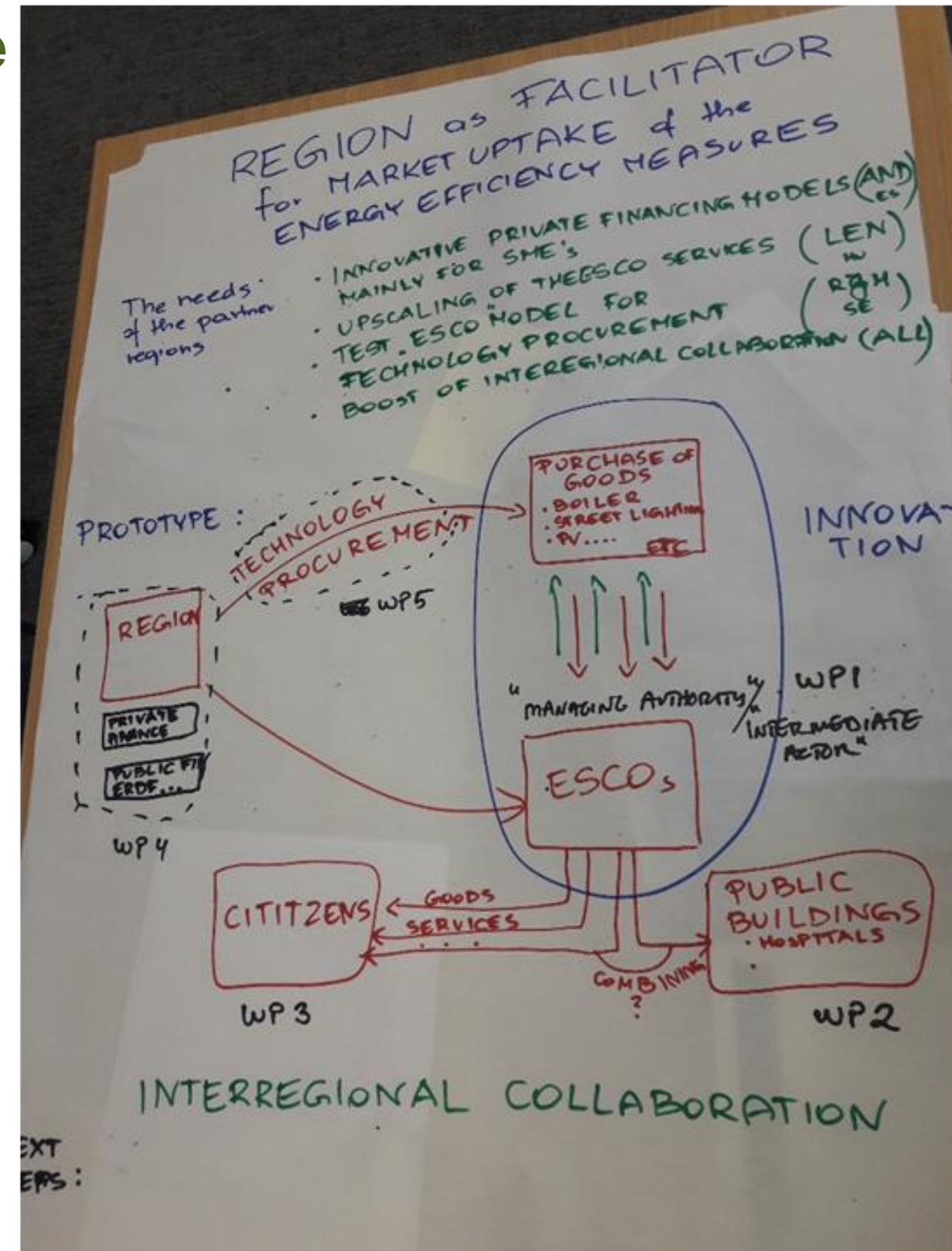
## Regions as facilitator for market uptake of the energy efficiency measures

### Aim of prototype:

Upscaling and extending the ESCO's model to technology procurement while targeting citizens.

### Methodology:

- Regions/local authorities would issue public procurements related to the purchase of 'sustainable' goods (boilers, etc.)
- These goods would then be bought by ESCOs and sold to citizens (and eventually to public buildings) at a lower price (aggregation).
- Public procurement could include a criterion that promotes products from cross-regional collaborations.





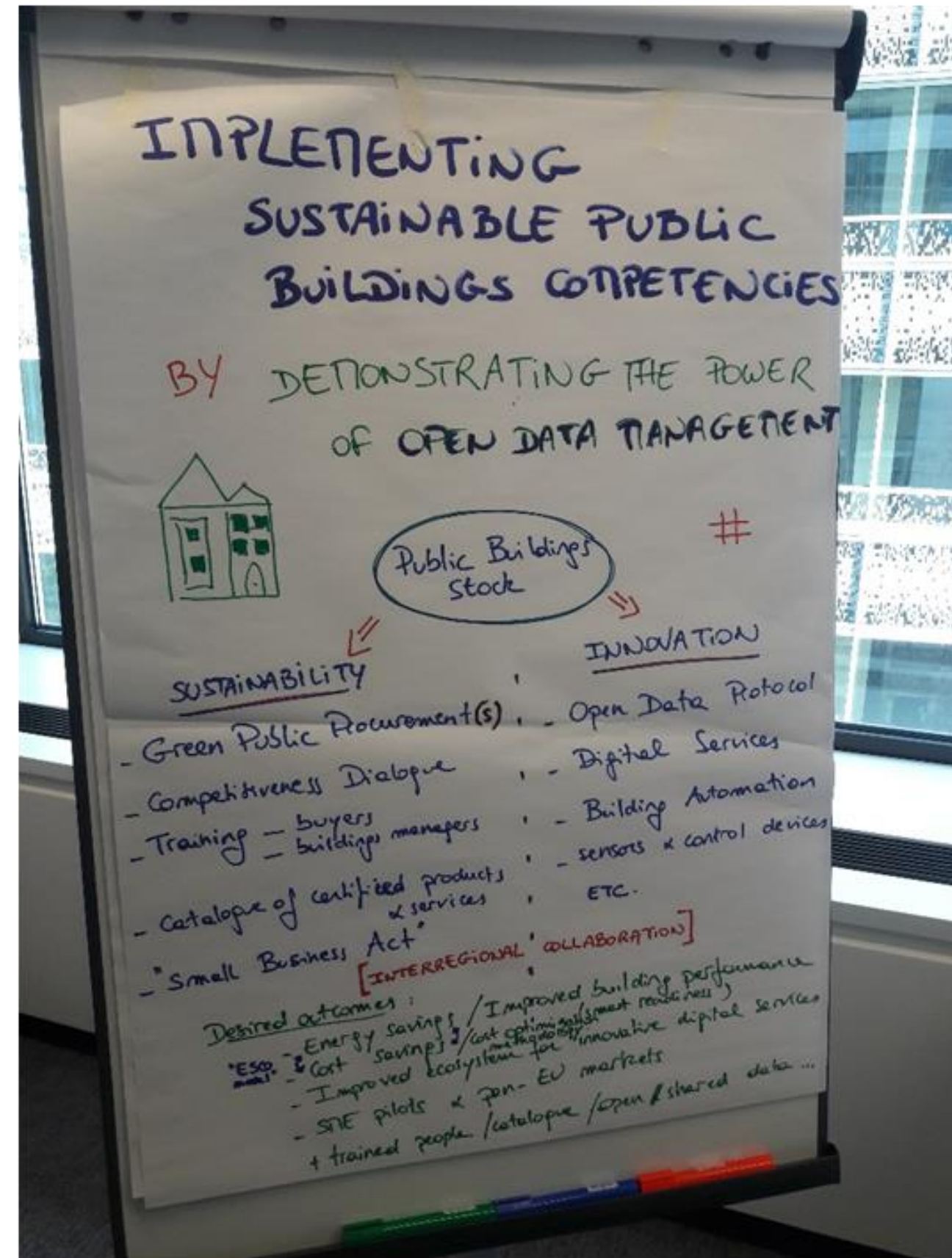
# Improving sustainability of public buildings through (green) public procurement

## Aim of this prototype:

Foster sustainability and innovation in public buildings stock, building upon increasing use of open data management.

## Methodology:

- Existing monitoring and management tools (sensors, etc.) and the utilization of new tools and analysis, diagnosis
- Open data management and the use of new tools, protocols and analysis could be promoted by public procurement



## Suggested Activities of green public procurement prototype:

### 1. Training for buyers and buildings managers

setting up catalogue of certified products ( Small Business Act)

### 2. Cross regional collaborations

sharing best practices,

establishing common guidelines,

toolbox,

common training scheme and certification

### 3. Implementation of sustainable public buildings competencies through **open data management**



## Maximizing social benefits of sustainable buildings for vulnerable groups

### Proposed objective:

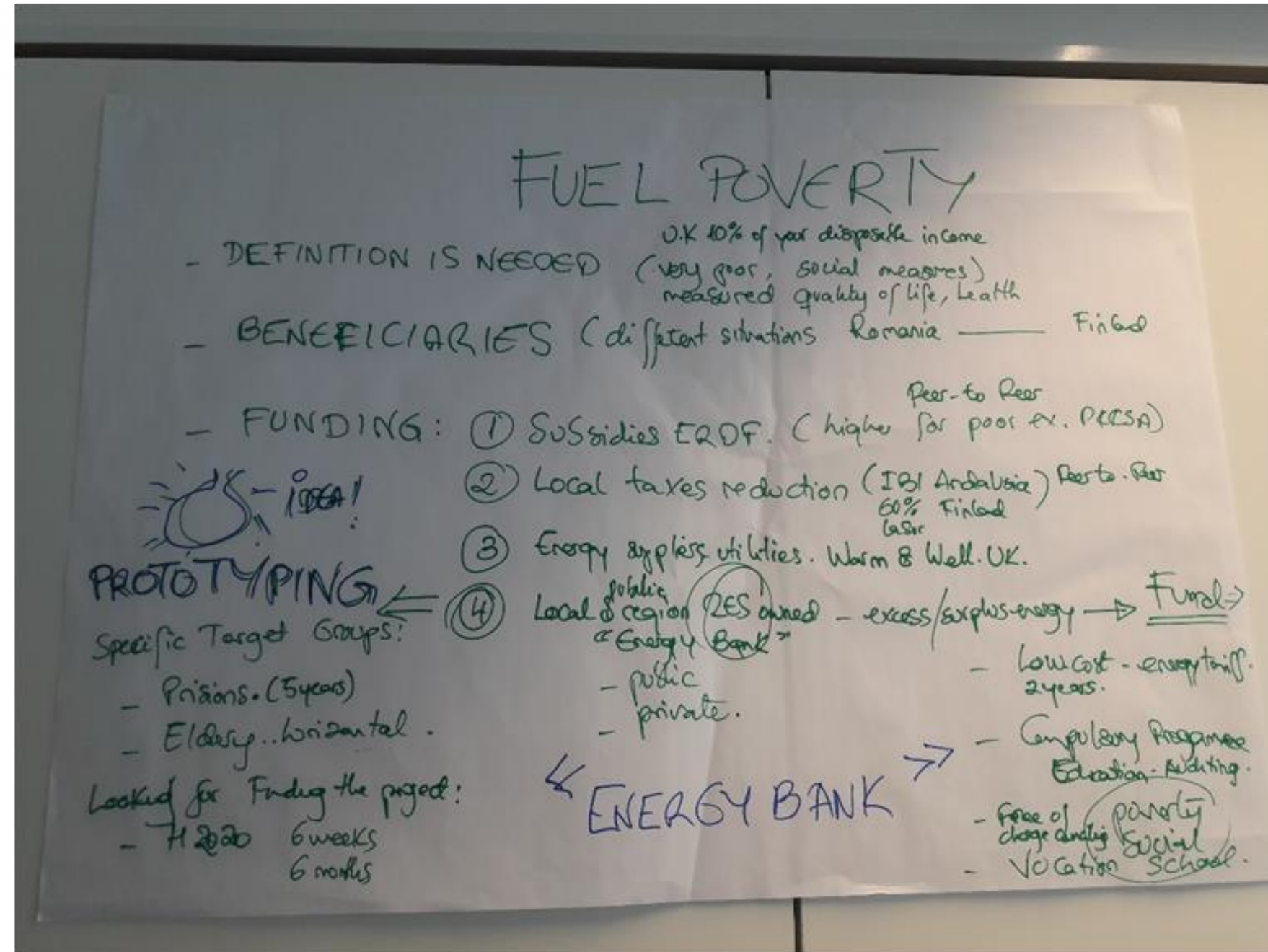
Set up local/regional energy funds (incl. public and eventually private funds), which would allow to provide lower income citizens with energy at a lower cost.

### Foreseen Tasks:

Peer to peer sessions  
Sharing best practices  
Financing.

### Initial interested Partners:

Andalusia, Gloucester, Slovenia,  
Lapland, Romania



**FUEL POVERTY**

- DEFINITION IS NEEDED (U.K 10% of your disposable income (very poor, social measures) measured quality of life, health)
- BENEFICIARIES (different situations Romania — Finland)
- FUNDING:
  - ① Subsidies ERDF. (higher for poor ex. PECSA) Peer-to Peer
  - ② Local taxes reduction (IBI Andalusia) Peer-to Peer 60% Finland
  - ③ Energy suppliers utilities. Warm & Well. UK.
  - ④ Local & region <sup>public</sup> ZES owned "Energy Bank" - excess/surplus-energy → Fund →
    - public
    - private.
    - Low cost - energy tariff 2 years.
    - Compulsory Programme Education - Auditing.
    - Free of charge and/or <sup>poorly</sup> Social School.
    - Vocational School.

**PROTOTYPING** ← IDEA!

Specific Target Groups:

- Prisons. (5 years)
- Elderly.. horizontal.

Looked for Funding the project:

- H2020 6 weeks
- 6 months

← **ENERGY BANK** →



more info:

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

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