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## Partnership of European Regions on Energy Efficiency in Buildings

Opportunities for economic, social, environmental and territorial development linked to energy efficiency in buildings



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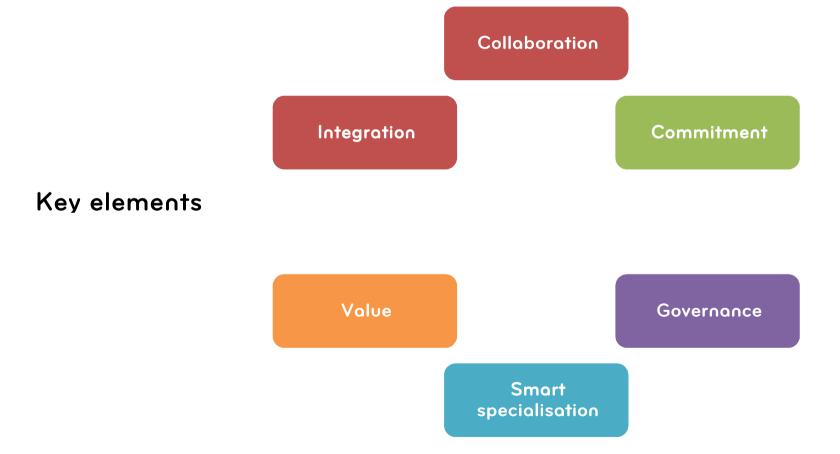
### Part I.

Introduction to the Sustainable Buildings Partnership: updated work plan, activities and functioning of the partnerships AAE)





Objective: Alliance between European regions to boost new markets and take advantage of regional opportunities for specialisation in sustainable construction.



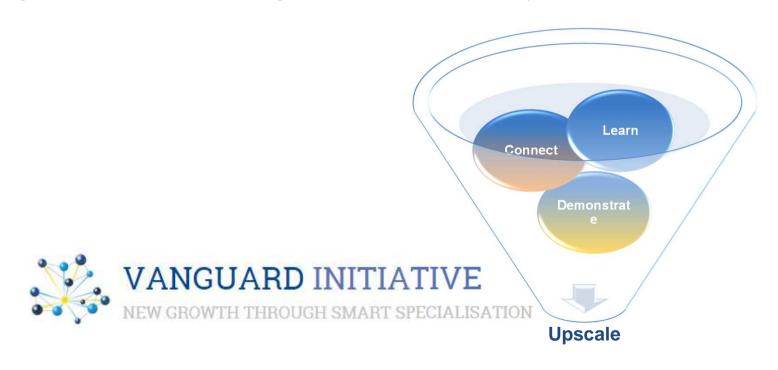


## Methodology



The methodology, similar to the Vanguard Initiative, has had a logical evolution that has been based on the following points:

- Discussion of common objectives and find complementarities between regions.
- Better understanding of regions' industrial competencies and capabilities.
- Development of joint strategic action plans.
- Aligning regional strategic investments arising from these roadmaps.







## Role of the institutions

### Regional leadership

#### 1°/ ADHESION

Focusing on reference themes and working groups of interest for regional development.

#### 4°/ DYNAMIZATION

Accompanying actions to take advantage of the synergies detected and which will result in the development of the region.

#### 2°/ IDENTIFICATION

Mapping of the capabilities and resources available, identifying synergies and relevant actors in the different fields interested in the partnership.

#### 5°/ EVALUATION

Monitoring the impact of the actions in the framework of interregional collaboration.

#### 3°/ DISSEMINATION

Communication of the different initiatives to facilitate the capture of participants, dissemination of the results of the projects and development of regional opportunities.

#### 6°/ PLANNING

Deployment or reorientation of regional strategies in order to boost the positive effects of the identified markets and stimulate or accelerate its development and impact in the territory.





## Structure of the governance

#### Steering Committee

Composed of the leader and coleader regions, the regions that lead the different working groups, and the European Commission

#### Supporting entities

Joint Research Centre JRC itself, or by Member States of the participating regions.

#### Interregional working groups

A working group will be created for each one of the themes of reference, integrated by all the regions interested and led by region. It will be in charge of coordinating, boosting and supporting the development of the different action lines proposed in their theme of reference.

top down bottom Up

## Institutions of the regional Administration

The regional leadership, either direct or through other entities, which are initiated with their adhesion to the Partnership.

#### Regional companies

Suppliers of goods and services throughout the whole value chain of the actions that are object of the collaboration.

## Regional representative entities

Specialised or representative of business sectors, which fit into the corresponding action lines. Also includes local entities interested in interregional collaboration.

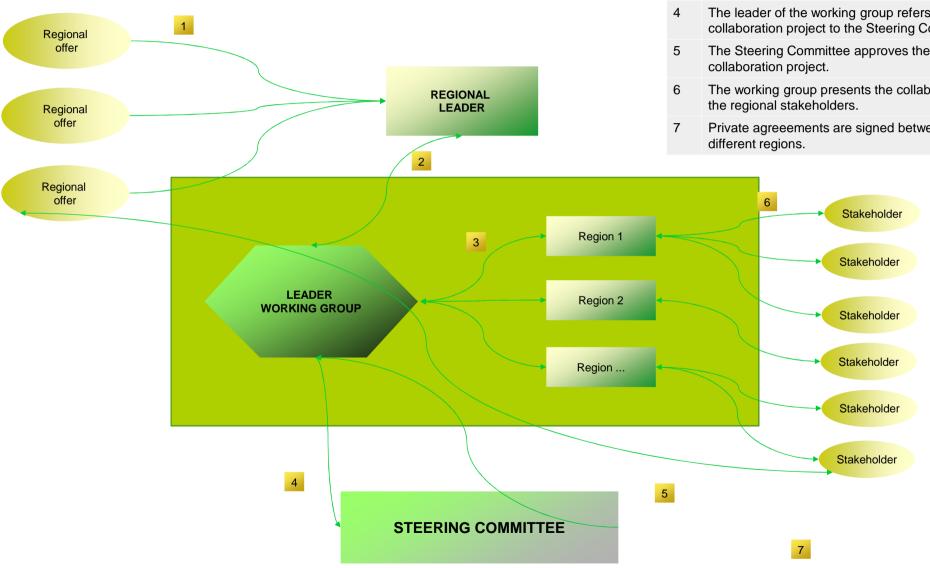
#### Users of energy solutions

Companies, entities or representatives of companies or users and consumers of the different participating regions

#### DIAGRAM OF THE FUNCTIONING OF THE **PARTNERSHIP**



- The company presents its offer of collaboration to the regional representative (leader).
- The regional representative (leader) filters, checks and evaluates the offer. The offer is transferred to the leader of the working group.
- The leader of the working group shares the offer with the rest of the regions.
- The leader of the working group refers the proposed collaboration project to the Steering Committee.
- The Steering Committee approves the proposed collaboration project.
- The working group presents the collaboration project to
- Private agreeements are signed between companies of different regions.





# Current composition of the Partnership



- 45 entities have confirmed their interest in the Partnership
- 19 countries of the EU have at least one entity present in the Partnership
- 31 of the entities represented are regional public administrations: 15 of the regional government; 10 with competences in energy; 5 from the field of innovation or development and 1 supreregional
- 3 public entities are of national scope and 3 are of local scope
- Finally, the interest shown by Universities (5) and the business scope (3) should be highlighted.





#### Initial phase. Configuration of the Partnership.

- 1. Identification of European regions interested in joining the Partnership and signing of the adhesion agreements. The adhesion of a region to the Partnership will be formalised through the signing of an institutional agreement that includes the political commitment of the region and names the entity that will assume the regional representation.
- 2. Definition of the themes and working groups...
- 3. Creation of the management bodies of the Partnership: Steering Committee, interregional working groups and regional working groups.
- **4. Identification of new members at European level and related initiatives** (e.g. networks, associations, clusters, programmes, projects, platforms) and establishing a protocol for its adhesion to the Partnership.
- **5. Elaboration of the Web collaborative platform** that allows the development of the actions of the Partnership.





**Phase 1. Learn.** The actions in this phase will be aimed at collecting information from the participating regions that will facilitate the identification of concrete strategies of interregional collaboration and potential projects to be developed:

- 1. Elaboration of a map of capacities of the participating regions. Collecting and integration of the regional information on the potential capacities of the participating regions, value chains, business network, innovation ecosystem, and professional specialisation, as well as the main regional actors. The JRC will propose a working methodology that will include the elaboration of a questionnaire with the information to be collected, that must be completed by all participating regions. This information will be completed with the information from external sources.
- 2. Involvement of the different regional actors in previous working groups.
- 3. Analysis of the information collected and identification of the complementarities and synergies between regions, as well as possible business collaboration proposals and demonstration projects to be developed.





**Phase 2. Connect.** The objective of the actions in this phase is the identification of opportunities of interregional collaboration. For this, the following actions will be carried out:

- 1. Identification of concrete action lines and pilot projects. Each working group will propose different lines of action that will count on the participation of all regional actors involved and will conclude with the identification of potential interregional collaboration projects.
- 2. Integration of the Partnership in European initiatives identified in the previous phases in order to build operational collaborations.
- 3. Matchmaking event. Once the projects have been defined and on the basis of the regional capacity map, different events will be organised that will allow the different regional actors to work together in order to advance in the concretion of the projects and in the real possibilities of interregional collaboration.
- 4. Search for funding for proposed projects.





**Phase 3. Demonstrate.** During this third phase, various business cooperation initiatives will be implemented, as well as various pilot projects to facilitate the deployment of new solutions, with special attention to innovative solutions and projects aimed at vulnerable groups:

- 1. Presentation of project proposals to the Commission for their assessment and identification of possible sources of funding.
- 2. Implementation of the business cooperation initiatives and pilot projects.
- 3. Monitoring and evaluation (indicators) of the results derived from the cooperation initiatives or joint pilot projects
- **4. Elaboration of a strategy of dissemination** results (including evidence for regional policies)
- **Phase 4. Upscale.** Starting from the results of the initiatives implemented in the previous phase, the deployment of joint real investments and the establishment of industrial cooperation on a larger scale.



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### Part II.

Round Table on main topics. Identification of the leader regions of the different Partnership topics and presentation of project ideas





## 1. ECO CONSTRUCTION, BIOCLIMATISM AND INSULATION OF BUILDINGS

Use of energy efficient materials, autochthonous or with low carbon footprint, in complete insulation solutions with high thermal performance. Innovative measures for the passive conditioning of buildings, through new solutions and non-conventional building elements.

# 2. RENEWABLE ENERGY INTEGRATION IN BUILDINGS

Innovative solutions in the generation and use of green energies, hybridisation in energy production, use of new materials, self-consumption and energy storage.

Architectural integration.

## 3. SYSTEMS OF MAXIMUM ENERGY EFFICIENCY USE IN BUILDINGS AND CITIES

Solutions that optimise the use of energy for climatisation, lighting, hot water, cooling and other uses, and that adapt to different types of users (including people with low resources) Putting in value the spaces, heritage and urban landscape through systems of high energy efficiency.





THEMES	LEADER REGION
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1. ECO CONSTRUCTION, BIOCLIMATISM AND INSULATION OF BUILDINGS	
2. RENEWABLE ENERGY INTEGRATION IN BUILDINGS	
3. SYSTEMS OF MAXIMUM ENERGY EFFICIENCY USE IN BUILDINGS AND CITIES	
4. OTHERS	





THEMES	Description
1. Reference theme	
2. Action line	
3. Name of offer of collaboration	
4. Entity that presents the offer	
5. Member of the Partnership that supports the offer	
Annex. Including data of the entity.	





THEMES	Description
1. SCOPE - Brief history of the project:	The scope of the project, briefly describing its main characteristics, the phase it is currently in and the opportunities for collaboration that it wants to take advantage of will be presented.
2. CURRENT MARKET AND POTENTIAL:	Description of the size and characteristics of the market associated with the products or services that are developed as object of the project, of its current state as well as the expected state.
3. ADDED VALUE SOUGHT BY THE COLLABORATION:	The added value of the products or services achieved as a result of the interregional collaborations (whether technological, social, regulatory, etc.) will be described in comparison to their current market situation.
4. ACTORS OF THE VALUE CHAIN:	The actors of the value chain required for the implementation of the collaborative project (design, manufacturers, distributors, execution of works, energy services, recycling, raw materials, etc.) will be defined.
5. REPLICABILITY:	It will be indicated if the solutions developed in the framework of the project could be implemented in other European regions.
6. OFFER OF REGIONAL SUPPORT (and in the case of their national or European entities):	The existing or foreseen regional, national or European support instruments in relation to the development of the collaboration project will be described.



## First Collaborations Offer (1/4)



THEMES	Description
1. Reference theme	Systems of maximum energy efficiency use in buildings and cities
2. Action line	Rehabilitation of historic buildings
3. Name of offer of collaboration	Efficient solutions in the rehabilitation of a historic building in Andalusia
4. Entity that presents the offer	Provincial Government of Cádiz/ Energy Management Agency - Province of Cádiz (Diputación de Cádiz / Agencia Provincial de la Energía )
5. Member of the Partnership that supports the offer	Andalusian Energy Agency (Agencia Andaluza de la Energía)
6. SCOPE - Brief history of the project:	The project consists of the energy rehabilitation of a historic building in the province of Cádiz with the objective of obtaining a nZEB building. For this, innovative constructive solutions will be developed in the thermal envelope of the building, as well as in its facilities.  All this will entail important know-how that can be used in other European regions in projects of energy rehabilitation of historic buildings in other countries, adapting them to to their different climatic conditions.



## First Collaborations Offer (2/4)



THEMES	Description
1. Reference theme	Eco construction, bioclimatism and insulation of buildings
2. Action line	Natural paints and coatings
3. Name of offer of collaboration	Applications of natural paints and coatings in exterior insulation systems or in ventilated facades.
4. Entity that presents the offer	GRAPHESTONE / www.graphenstone.com
5. Member of the Partnership that supports the offer	Andalusian Energy Agency (Agencia Andaluza de la Energía)
6. SCOPE - Brief history of the project:	Graphenstone is a manufacturer of 100% ecological and natural paints and coatings, based on lime and graphene. At present, its use is possible in External Thermal Insulation Composites Systems or ventilated facades, such as mortar as well as paints with high level solar reflectance to increase energy saving.  Based on the above-mentioned, Graphenstone proposes a collaboration process with manufacturing companies of External thermal Insulation Composites Systems or ventilated facades.



## First Collaborations Offer (3/4)



THEMES	Description
1. Reference theme	Eco construction, bioclimatism and insulation of buildings
2. Action line	Industrialised energetically sustainable housing
3. Name of offer of collaboration	Efficient systems for the outer envelope and interior installations of industrialised construction
4. Entity that presents the offer	SPANISH ASSOCIATION OF PROFESSIONALS IN SMART AND SUSTAINABLE SPACES (ASOCIACIÓN AEPEIS - ASOCIACIÓN ESPAÑOLA DE PROFESIONALES EN ESPACIOS INTELIGENTES Y SOSTENIBLES)
5. Member of the Partnership that supports the offer	Andalusian Energy Agency (Agencia Andaluza de la Energía)
6. SCOPE - Brief history of the project:	The construction system called Atlas Systems, based on steel structures formed in cold type steel framing. With this system it is possible to make houses 30% more economical and in 50% less time, and with a 70% lower energy consumption. Only 2% of the materials used are discarded in the process, and all materials used are recycled and recylable.  Based on the above-mentioned, AEPEIS proposes a collaboration with companies of Thermoacoustic Insulation Systems for the manufacturing of industrialised housing.



# First Collaborations Offer (4/4)



THEMES	Description
1. Reference theme	Systems of maximum energy efficiency use in buildings and cities
2. Action line	Rehabilitation of public buildings for the integration of renewable technologies and energy efficient systems in the educative scope.
3. Name of offer of collaboration	Efficient solutions in the rehabilitation of public buildings of teaching institutes in Andalusia
4. Entity that presents the offer	REDEJA – Energy Management Network of the Andalusian Regional Government / Andalusian Energy Agency (Agencia Andaluza de la Energía)
5. Member of the Partnership that supports the offer	Andalusian Energy Agency (Agencia Andaluza de la Energía)
6. SCOPE - Brief history of the project:	REDEJA is a tool created by the Andalusian Regional Government aimed at promoting, within the Andalusian administration, principles of efficiency in the contracting of energy supplies, energy saving and efficiency actions, as well as implementing renewable energy facilities in its buildings.  The project consists on the integration of technologies to use the high solar radiation which Andalusa counts on, together wih innovative solutions of energy efficiency and control of demand in a public centre of secondary education, with the objective of reaching the specifications of nZEB buildings.



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### Part III.

Needs for the development of Sustainable Buildings projects (JRC and all participants)





### Part IV.

Planning of next partnership activities (JRC, AAE).



# Planning of partnership activities



		May	Jun	Jul	Ago	Sep	Oct	Nov	Dic
	Identification of European regions								
	Interregional coordination meeting (Brussels)								
0	Definition of the themes and working groups								
Phase	Creation of the management bodies								
된	Participation in Smart Conference meeting (Helsinki)								
	Identification of new members at European level								
	Elaboration of the Web – collaborative platform								
<b>—</b>	Elaboration of a map of capacities								
	Involvement of the different regional actors								
Phase	Analysis of the information collected								
<u> </u>	Interregional coordination meeting (Brussels)								
	Identification of concrete projects								
0 0	Integration in European initiatives								
Phase	Matchmaking event (October Brussels, Sevilla November)								
	Search for funding								
	Presentation of project proposals to the Commission								
ന	Implementation of the business cooperation initiatives and pilot projects								
Phase	Monitoring and evaluation								
α.	Elaboration of a strategy of dissemination								
	Participation in Smart Conference meeting (tbc)								





Part V.
Wrap-up (JRC,AAE)