

<b>Project title</b>	<b>Sustainable Tourism through Environmental Energy Technologies in Buildings of High Architectural Interest</b>
<b>Acronym</b>	<b>STETAI</b>
<b>Programme</b>	<b>Interreg VI B IPA ADRION 2021-2027</b>
<b>Priority</b>	<i>2. Supporting a greener and climate resilient Adriatic and Ionian region</i>
<b>Specific Objective</b>	<i>2.1. Enhancing resilience to climate change, natural and man-made disasters in the Adriatic- Ionian region</i>
<b>Partnership size</b>	6 – 12 partners
<b>Partnership composition</b>	>3 from IPA countries, and >3 from ERDF countries
<b>Budget</b>	max €1.500.000
<b>Duration</b>	max 36 months
<b>Contact point</b>	Mr. Nikos Koutsomarkos, Urban Development Expert, Planner, MSc, MBA Project4, e-mail: <a href="mailto:info@pr4.gr">info@pr4.gr</a>

## STETAI Project Proposal

### Project summary

Adriatic-Ionian macroregion’s cultural heritage, encompassing traditional and monumental buildings, stands as one of our most invaluable assets. Historic buildings hold immense significance as symbols of A-I cities, towns, and villages, with entire districts serving as a testament to Europe’s rich cultural heritage. It is crucial to acknowledge that a significant portion of the EU’s building stock, approximately 35%, is over 50 years old, and a staggering 75% of these buildings lack energy efficiency.

These historic structures, which have withstood the test of time, contribute to the identity and distinctiveness of cities by serving as iconic landmarks. However, it is important to acknowledge that many of these buildings fail to meet modern standards of comfort and energy efficiency. As a result, they often consume significant amounts of energy and emit higher-than-average levels of greenhouse gases.

There exists a prevailing misconception in many countries that historic buildings, particularly those with special protection, should be exempt from incorporating new energy-efficient technologies, because they may inadvertently compromise the cultural and aesthetic qualities of these heritage buildings. While it is important to approach the renovation of historic buildings with caution, the

argument that they cannot be adapted to integrate renewable energy installations without compromising their essence and appearance is not always a solid one in the context of societal sustainability. Alternative approaches must be explored to strike a balance between energy efficiency and the preservation of their cultural and aesthetic value. An effective approach to reducing the environmental impact of historic buildings involves improving the thermal transmittance of the building envelope without compromising the integrity of their façades, such as through the application of thermal insulation.

Beyond the opportunities for energy and carbon savings, the maintenance and improvement of energy performance in historic buildings are essential for preserving their functionality and preventing deterioration. Enhancing the energy performance of these buildings also leads to improved internal comfort conditions, reduced energy demand, and mitigates the risk of energy poverty. Providing occupants with contemporary standards of comfort is a critical requirement to ensure the continued use, conservation, and longevity of historic buildings.

The integration of energy-efficient technologies into historic buildings presents an opportunity to simultaneously preserve cultural heritage and contribute to sustainability goals. By carefully considering the specific characteristics of each building, it is possible to strike a balance between energy efficiency and the preservation of their historic integrity. This approach will not only yield environmental benefits but also improve comfort conditions and ensure the continued use and longevity of these valuable structures. Innovative and sensitive approaches to renovation must be developed to ensure the preservation of their cultural and aesthetic significance while simultaneously improving their energy performance.

Taking into account the urgency to foster the energy renovation of the historic buildings, the aim of the project is to facilitate their preservation through the improvement of their energy efficiency. The energy renovation of the historic buildings should be constituted as a priority leading to the effective preservation and revitalization of the historic buildings.

Firstly, the analysis of existing practices will be conducted so as to identify replicable best practices in the Adriatic-Ionian Macroregion taking into consideration the characteristics of the historic building along with other conditions. Emphasis will be given on the mapping of the current barriers, while proposals will be formulated for addressing them effectively. Specialized energy efficiency solutions and practices will be applied in pilot cases so as to foster the unhampered and efficient energy renovation of the historic buildings. Fundamental aim of the project is the improvement of the collaboration and coordination of the involved stakeholders, which will be achieved through the establishment of a network and the utilization of innovative tools and approaches.

Moreover, the project will support the energy renovation of the historic buildings through the dissemination of the developed resources and the reinforcement of the existing knowledge of the involved stakeholders. More specifically, different categories of stakeholders will benefit from improved skills and knowledge for the energy renovation of the historic buildings, such as policy officers, energy efficiency professionals, banking sector, citizens etc. Specialized tools and resources will be utilized so as to attain the effective re-skilling of the involved stakeholders.

The project approach is based on the joint development and implementation, which will promote transnational cooperation across Adriatic-Ionian Macroregion areas through exchanging and transferring experiences triggered by the conduction of capacity building activities, which will

encourage the energy renovation of the buildings in accordance to the needs and challenges of the region.

#### Identification of Problems and Bottlenecks:

In order to facilitate the preservation and the energy renovation of the historic buildings in the Adriatic-Ionian Macroregion, it is necessary to address the following problems and bottlenecks:

- High renovation costs
- Limited compatibility of new functions/technologies with historic buildings
- Difficulties to upgrade the historic buildings according to the actual requirements
- Lack of data and the inability to identify the most suitable technical solutions
- Limited knowledge and experience of the energy managers and the lack of skillful personnel for implementing the energy efficiency interventions
- Lack of information of the stakeholders
- Limited funding instruments and opportunities
- Lack of communication and cooperation of the different involved public authorities
- Uncertainty of the energy savings so as to justify the implementation of energy efficiency
- Pressure for exploiting alternatively the use of the space due to the high price of the land and the urgency to deploy new economic activities

#### Overall Aim of the Project:

The overall aim of this project is to promote energy efficiency measures and practices in the cultural heritage and traditional buildings and settlements in the tourism sector of the EUSAIR countries.

#### Objectives and Results:

The project will facilitate the fulfillment of the following objectives:

- I. Understand the potential for improving the energy efficiency in historic buildings and identify replicable best practices
- II. Improve the collaboration and coordination of the involved stakeholders through the application of innovative approaches and the developed of specialized resources
- III. Test energy efficiency measures and practices for preserving historic buildings through their energy renovation
- IV. Enhance the existing level of knowledge of the different categories of stakeholders in regards the energy renovation of the historic buildings
- V. Increase the visibility and attractiveness of the energy renovation for the case of historic buildings

## Work Packages:

### Work Package 1: Analysis of the European and national context

- T.1.1 Review of national context

Investigation of the conditions of each country in terms of tourism, buildings and traditional buildings

- T.1.2 Presentation of the EU status

Literature review and presentation of European status (for sustainable tourism and heritage buildings) and relevant European studies (for heritage buildings). Legislation and EU projects

- T.1.3 - Good practices from EU projects

Information and data from all projects and stakeholders involved in new energy practices and techniques in the building stock of the tourism sector, for modern standards of energy production and consumption according to modern technologies and international standards.

Focus on heritage buildings and not on the building sector for tourism in general.

- T.1.4 Main conclusions and recommendations

Cost-benefit analysis to support the decision to promote energy efficiency in cultural and architectural heritage buildings (i.e. drivers and barriers at legislative, technical, economic, social level).

Policy recommendations for the preparation of pilot actions in EUSAIR countries involved

### Work Package 2: Creation of a networking platform

- T.2.1 Creation of Advisory Board

- T.2.2 Development of online platform

Identification of prerequisites, main features and required actions for the development of a network and online platform that will provide stakeholders with free access to useful information / data about technical solutions, energy saving and integration of renewable sources in tourist accommodation

Explore different options

Ensure sustainable development for the coming years

- T.2.3 Clustering and networking

Explore synergies with other Initiatives, e.g. BAUHAS, BUILD UP, etc. and relevant projects. Possible links with national one-stop-shops for building renovations

- T.2.4 Development of national stakeholder engagement plans

### Work Package 3: Development of an assessment tool

- T.3.1 Identification of key decision parameters

Relevant indicators

- T.3.2 Development of a software

Determination of prerequisites, main characteristics and required actions for the development of a tool that will allow the energy managers of the facilities to issue preliminary studies. (Renovation Passports / Energy Audits)

- T.3.3 Testing the tool

- T.3.4 Provision of vocational training on assessment tool

- T.3.5 Conclusions and recommendations to support building owners and decision making

Work Package 4: Pilot cases > Facilitator / financing

- T.4.1 Pilot case in country xxx

- T.4.2 Pilot case in country xxx

- T.4.3 Conclusions and recommendations to support building owners and decision making

Work Package 5: Communication and dissemination

- T.5.1 Communication and dissemination strategy

- T.5.2 Project brand development and materials

- T.5.3 Digital Dissemination

- T.5.4 Events - Setup of national expert panels

- T.5.5 Setup of pilot campaigns at national level

- T.5.6 Sustainability, replication and exploitation of project results