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CAMPUS

D.2.5.1- Report on the Second Regional Conference

The second Regional Conference of the CAMPUS project took place on 18 February 2026 at the Tafuri Hall of Palazzo Badoer in Venice, bringing together project partners, institutions, UNESCO heritage experts, and territorial stakeholders with the aim of sharing methodologies, tools, and initial results related to the development of climate adaptation plans for World Heritage sites.

The event represented a key opportunity for dialogue between theory and practice on the integration of climate change into UNESCO site management systems, with particular reference to case studies in the Italy–Croatia area.

Opening of the Conference and Introduction

The conference was opened by representatives of Iuav University of Venice, who framed the CAMPUS project within the broader context of European and UNESCO policies on climate change and cultural heritage management.

It was emphasized that the project aims to bridge the gap between scientific knowledge of climate risks and operational management tools through climate scenarios, adaptation plans, and pilot actions in the UNESCO sites involved.

From the outset, the central importance of integration emerged: climate change cannot be addressed as a sectoral issue but must become a stable component of site management plans, territorial policies, and multi-level governance systems.

Overview of the CAMPUS Project

The presentation by a representative of the Municipality of Ferrara provided an overview of the CAMPUS project, highlighting its structure around three main components:

- analysis of climate risks and vulnerability of UNESCO sites
- development of Climate Adaptation Plans (CAPs)
- identification of measures and pilot actions.

The project was described as a progressive process starting from the scientific understanding of risks (heatwaves, droughts, floods) and leading to operational planning and management tools.

In this sense, the added value of CAMPUS lies in translating climate data and scenarios into intervention priorities and management decisions for UNESCO sites, while also fostering cross-border cooperation between Italy and Croatia.

Keynote Lecture – Integrating Climate Action into UNESCO Management Plans

The keynote lecture by Katia Basili provided the conceptual and policy framework within which the CAMPUS project operates, highlighting the evolution of UNESCO climate policies: from the recognition of risk to the need for implementation within management plans.

It was noted that, despite the extensive development of international guidelines and tools, the integration of climate change into site management remains uneven. The main critical issues identified include:

- fragmented governance
- separation between territorial planning and heritage management
- lack of measurable climate indicators

A central element of the presentation concerned the role of the UNESCO Management Plan, understood not merely as a document but as a coordination platform among environmental, energy, and territorial policies.

From this perspective, climate change must become a structural component of site governance, moving beyond an episodic project-based approach.

Through the cases of Ferrara and Vicenza and the Palladian Villas, the lecture illustrated how integrating climate considerations into management plans enables a shift from risk awareness to structured adaptation, linking vulnerability analysis, intervention priorities, and planning decisions.

The CAMPUS project was presented as a key tool for transforming risk maps and climate data into operational choices.

Multi-Risk Scenarios for UNESCO Sites: IUAV Methodological Approach

The session curated by the IUAV research group presented in detail the methodology developed within the CAMPUS project for constructing multi-risk scenarios for UNESCO sites.

The presentation outlined an analytical framework integrating climatic components, territorial characteristics, and heritage vulnerability, with the aim of supporting the development of adaptation plans.

The methodology is based on a systemic interpretation of the UNESCO sites involved in the project:

- Ferrara and the Po Delta
- the Sanctuary of San Michele
- Trogir
- Stari Grad
- Plitvice Lakes National Park

These sites are interpreted as complex cultural landscapes where natural, settlement, and infrastructural components interact.

The first analytical step involved identifying the main climate hazards relevant for each site, including:

- extreme precipitation events
- floods
- heatwaves
- droughts

These hazards were analyzed in relation to the territorial and morphological characteristics of each site, highlighting how risk profiles vary significantly between coastal environments, historic urban areas, and rural or natural landscapes.

A second level of analysis focused on the vulnerability of built heritage. In historic urban contexts, a detailed architectural analysis was developed by breaking down buildings into units and construction components in order to understand how materials and building techniques respond to climatic stress.

This approach allows the identification of particularly sensitive elements such as:

- roofs
- masonry
- drainage systems
- stone surfaces

and links them to potential degradation mechanisms triggered by extreme climate events.

At the same time, in rural and natural landscapes the analysis focused on territorial components and land use, considering for example the vulnerability of:

- historic agricultural systems
- traditional hydraulic infrastructures
- protected ecosystems

In this way, climate risk is interpreted not only as a threat to individual heritage assets but as a process affecting the entire landscape system of the UNESCO site.

The multi-risk methodology then integrates hazard, exposure, and vulnerability into maps and interpretative scenarios that allow the identification of priority intervention areas and guide the definition of adaptation strategies.

A key aspect highlighted in the IUAV presentation is the transition from risk assessment to planning, using these scenarios as the knowledge base for UNESCO site adaptation plans.

It was also emphasized that the approach developed within the CAMPUS project facilitates comparability among different sites and replicability in other World Heritage contexts, contributing to the development of a shared European methodological framework for climate adaptation in heritage sites.

Living Labs as Participatory Tools: From Theory to Practice

The presentation by Farah Makki explored the role of Living Labs in the co-design of climate adaptation measures for the UNESCO site of Ferrara.

Living Labs were presented as mobile participation laboratories involving institutions, experts, local communities, and territorial stakeholders in identifying risks and co-creating adaptation measures.

The process consisted of three thematic workshops dedicated to the main landscape systems of the site:

- the Renaissance city
- the rural landscape of the Delizie
- the Po river hydraulic system

Through field explorations and co-design sessions, participants identified critical issues and adaptation proposals, generating around 80 measures, later included in the draft Climate Adaptation Plan.

An important outcome was the value of the participatory process in building consensus and shared responsibility in heritage management.

Living Labs made it possible to integrate technical knowledge with local perceptions of risk, strengthening the adaptive capacity of the site.

The presentation also highlighted initiatives targeting younger generations (“Future Keepers”), aimed at raising awareness among students and communities about the relationship between heritage and climate change, contributing to the development of a long-term culture of heritage care.

Following the Ferrara experience, Sara Bianchi and Andrea Santoro presented the application of the Living Lab approach in the other Italian case studies of the project, demonstrating its adaptability and operational value in different territorial contexts.

In particular, in the Po Delta landscapes and in the site of Monte Sant’Angelo, Living Labs facilitated dialogue among managing authorities, local administrations, and socio-economic actors, bringing

to light specific issues related to the climate vulnerability of coastal, agricultural, and settlement systems.

Similarly to the Ferrara case, the participatory process allowed the collection of local knowledge, perceived priorities, and intervention proposals, contributing to the shared definition of adaptation measures and their integration into existing territorial strategies.

Overall, the three contributions highlighted how Living Labs represent, within the CAMPUS project, a common but flexible methodological tool capable of supporting the co-design of climate adaptation strategies across different UNESCO sites.

Adaptation Plans for UNESCO Sites: Methodology and Drafts

The presentation by Chiara Ferrara and Filippo Lenzerini introduced the structure and contents of the Climate Adaptation Plan (CAP) for the UNESCO site of Ferrara, developed within the CAMPUS project.

The CAP was described as a tool integrated with the Site Management Plan and with territorial regulatory frameworks.

It is structured around:

- general and specific objectives
- measures
- a monitoring system

The main objectives include:

- increasing the site's adaptability to climate change
- mitigating risks
- ensuring continuous monitoring
- strengthening multi-level governance

The plan includes 61 measures, classified according to territorial scope:

- city

- rural landscape
- river system

and type:

- structural measures
- strategic actions
- governance measures
- research and training initiatives

The monitoring system was also presented, based on effectiveness indicators and intermediate and final evaluation milestones (2028 and 2031).

The presentation by Sebastiano Carrer illustrated the structure of the Climate Adaptation Plan for the Veneto sector of the Po Delta, with particular attention to the Caleri and Scardovari lagoon systems.

Analyses conducted by IUAV and local technicians highlight significant criticalities related to:

- subsidence
- salinization
- coastal flooding risk

with a strong concentration in lagoon areas of high ecological and productive value.

The plan therefore defines objectives focused on:

- hydraulic defense
- rebalancing between freshwater and saltwater systems
- conservation of lagoon morphologies
- support for fishing and aquaculture activities

It proposes a set of measures including morphological interventions (dredging, shoreline reinforcement, restoration of salt marshes and tidal flats), ecosystem-based actions, and governance and monitoring tools.

Feasibility Studies and Pilot Projects: Preliminary Results

The final session, presented by Ivan Carević, illustrated the preliminary results of feasibility studies and pilot projects in the Croatian sites of Trogir and Stari Grad.

Climate analysis revealed a clear trend in both sites of:

- increasing temperatures
- greater precipitation variability
- growing exposure to heatwaves and floods

The data also show high vulnerability of both cultural heritage and the population to flood risks, with approximately 38% of inhabitants and 39% of heritage assets exposed to flooding risk.

Specific case studies were presented, including recurring floods in Trogir, analyzed through GIS mapping and fire brigade intervention data.

The presentation demonstrated how feasibility studies help translate risk analysis into pilot actions and local adaptation strategies, contributing to the broader objectives of the CAMPUS project.

Final Discussion and Conclusions

The conference concluded with a collective discussion on the results presented and the future perspectives of the project.

A general consensus emerged around several key messages:

- climate change represents a structural challenge for the governance of UNESCO sites
- integration between heritage management and climate policies is essential for resilience
- adaptation plans must become operational and shared tools
- the participation of stakeholders and local communities is fundamental to the effectiveness of adaptation strategies.