



ACTIVITY: workshop AELCLIC_PATHFINDER project

DATE and TIME: July 16, 2019 - from 3.00 p.m. to 6:00 p.m.

PLACE: Biblioteca Comunale Teresiana, Sala Teresiana, Via Ardigò 13, Mantova

ORGANIZERS: University of Bologna, University IUAV of Venice

PARTICIPANTS:

Organizers

- University of Bologna (AELCLIC partner): Daniele Torreggiani, Ludovica Marinaro
- University IUAV of Venice (AELCLIC Third Party): Francesco Musco, Denis Maragno

Stakeholders who accepted to join the network of stakeholders:

- Professional association of agronomists of Mantova: Marco Goldoni;
- Lombardy Region: Luisa Pedrazzini;
- Municipality of Mantova: Sandra Savazzi; Elisa Parisi; Sofia Salardi; Mariangela Busi; Roberta Marchioro;
- Consorzio di Bonifica Territori del Mincio: Barbara Schiavinato;
- Mantova Ambiente, gruppo MEA Spa: Simone Massari;
- Labter Crea Mantova: Sandro Sutti;
- Gazzetta di Mantova: Monica Viviani;
- Aerodron Srl: Romeo Broglia.

The following stakeholders accepted to join the network of stakeholders and planned to participate in the workshop but have not been able to attend due to unforeseen circumstances:

- **Municipality of Mantova:** Giulia Moraschi; Monica Bedini; Gabriella Montanarini; Iva Tiziana Silvestrin; Francesca Paini; Marcella Ghidoni
- **Centro studi PIM:** Cristina Alinovi
- **Mantova Ambiente, gruppo TEA Spa:** Giorgio Grossi

KEY OBJECTIVES of THE ACTIVITY (expected outcomes):

This is the second workshop organized in the “city of Mantova”, selected as one of the 16 pilot landscapes where the AELCLIC project aims to create a network of local stakeholders with the capacity to co-define plans for the Adaptation of their landscape to Climate Change. In particular, this second workshop, attended by 16 persons, representatives of the local stakeholder’s ecosystem and the event organizers, aims at defining and mapping the relevant impacts of climate change for the study area and at co-defining the contents and structure of a future Landscape Adaptation Plan to Climate Change (LACAP).

The main objectives of the workshop could be summarized as follows:

- Providing a brief explanation and description of the project, mainly for the benefit of those who did not attend the first workshop;
- Facilitating the contact and the networking between the stakeholders and with the project’s partners;
- Co-identifying a diagnosis of climate change impacts known/perceived by the stakeholders in the pilot area;



- Evaluating the interest of the new stakeholders and confirm that of the already existing network in collaborating in the project, and receive their expression of interest in appearing in the project website as a member of the network of stakeholders;
- Co-defining the possible contents of a future plan for adapting the pilot landscape to climate change and how it may be connected to spatial and land use plans and other sector plans.

All the stakeholders invited to the discussion, new participants included, have confirmed their interest in collaborating in the project. They have also welcomed to be updated on the project development and the future definition of a climate adaptation plan within the pilot area, intended as an integrated and systemic solution and as an information document supporting territorial and sector planning, as well as a reference for public or private initiatives on climate change adaptation.

AGENDA:

3.00-3.15 p.m. The AELCLIC project: towards a Landscape adaptation plan to climate Change, the second Workshop.

- Opening welcome, brief presentation of the project and presentation of the agenda
- Summary of the results of the 1st workshop
- The stakeholders introduce themselves

3.15 – 4.00 p.m. | Changing landscapes and shared strategies to inhabit them.

Implementation of the results of the first workshop, both for the diagnosis of the impacts of climate change on the landscape, and for the future definition of the plan for adapting the landscape to climate change.

- Coding and mapping of climate change impacts on the pilot area, understanding their potential effect on the landscape. The group work has been based on some thematic maps illustrating some of the main effects of climate change detected during the first workshop (eg. Temperature rise and heat waves - See the report of the first workshop).
- Definition of adaptation opportunities and strategies, also referring to the different types of urban areas.

4.00 – 5.15 p.m. | The future Plan: Content and structure.

- Open discussion focused on the co-definition of the possible structure and contents of the future LACAP. The project activities, benefitting of the previous work carried out in the pilot area by the city of Mantova and IUAV, aim at creating added-value by co-defining the contents of a future Landscape Climate-Change Adaptation Plan, intended as a systemic and cross-sector document lending support to spatial and sector planning, also based on some examples and best practices in the international context.

5.15 – 6.00 p.m. | A roadmap for the plan.

Since the goal of the project is the creation of *“regional/local consortia with the **social, financial, administrative and technical capacity** to co-define in the future Landscape Adaptation Plans to Climate Change”*, this last part is aimed at defining what will be needed to create the plan in terms of knowledge, activities and resources (already available or to be acquired), as well as at exploring how the future plan may be connected to spatial and land use plans and other sector plans.

6.00 p.m. | Closure



KEY OBJECTIVE of THE ACTIVITY (expected outcomes)

1. Definition of climate change impacts on the pilot area and understanding their potential effect on the landscape.

2. Initial draft of the contents and the structure of the future LACAP

1. Defining the climate change impacts on the pilot area and understanding their potential effect on the landscape: Starting from the results of the previous workshop and looking at an aerial image of the city and at a thematic map representing the summer heat wave effects, the participants discuss about the perceived impacts in the various parts of the city.

The workshop has allowed to confirm the main perceived impacts of climate change on the city of Mantova emerged during the first workshop. From this discussion, the list of perceived impacts has been confirmed/implemented. This updated list now thus reflects a hierarchy of importance attributed to each climate change effect. The proposals outlined to face these effects are then divided by themes and areas that help defining the adaptation strategies.

The key impacts confirmed are:

- Increased temperatures;
- Heat waves;
- Air quality;
- Extreme events;
- Water scarcity;
- Flooding;
- Invasion of alien species;
- Eutrophication of lakes;
- Increasing number of insects and seasonal allergies;
- Sudden events;
- Hydrogeological instability;
- Negative impacts on tourism industry.

2. Proposal of strategies for the adaptation plan. Starting from the identification of the main critical issues and obstacles detected on the territory both on the administrative, regulatory, cultural and infrastructural level, the key themes and approaches identified during the first workshop have been confirmed and led to the further formulation of the contents of the future LACAP.

The key themes identified are:

- Policy integration:
- Policies and actions for the transformations of urban public spaces
- Mobility
- Water Use and management
- Soil consumption
- Communication and awareness raising

Discussion: the key impacts and critical issues identified by the group work contribute to define the framework of the effects of climate change on the pilot case of the city of Mantova. The results of



the first workshop have been confirmed and the discussion has allowed to investigate the main impacts on the landscape of the main climate change drivers, such as the increase in temperatures and urban heat island effects. Some thematic maps, portraying the main impacts identified, have allowed the stakeholders to evaluate how the urban fabric and the configuration of the public space currently facilitates or complicates an effective adaptation. The attention has been focused, for example, on the important role of vegetation in public spaces and open spaces in general, making it clear its effective contribution in reducing air pollution and improving air quality, thermal well-being and increasing sociality and use of places. This work has also allowed to discuss more clearly some impacts that had been treated less extensively during the first workshop. In particular, the effects of high-speed winds and the important role of vegetation in screening winds and affecting air circulation have been discussed. It also allowed to further stimulate the critical awareness of the network, inviting the participants to work in a landscape scenario perspective. This step, far from aiming at an exhaustive mapping, has proved useful to trigger the second part of the workshop.

2. Initial draft of the contents and structure of the future LACAP

In the second part of the workshop, the discussion has been aimed at outlining the fundamental contents and a possible structure of the future LACAP. Some fundamental characteristics of the LACAP and the role it may play in connection with the spatial planning tools have also been discussed.

The LACAP will have a systemic and cross-scale nature. Although it will be calibrated for the urban scale of the city of Mantua, it will have a particular impact on ecosystems, this calling for the need to define consistent strategies capable of interacting with even wider territorial systems. The plan will therefore provide complementary strategies both on the urban and broader scale.

The institutional and regulatory framework

- **Agreements with the authorities responsible for territorial governance and landscape protection.** One of the general and priority criteria for drafting the plan concerns the need to establish the necessary synergies with the bodies responsible for the protection and government of the territory and the landscape at the various scales: Region, Superintendence of Cultural Heritage, Basin Authority and local administrations. The relationships that must be established with the region and with the superintendence are of particular importance, so that the adaptations to climate change foreseen are always consistent with the need to protect, conserve and promote the urban, architectural and in general cultural heritage of the city.
- **Integration and complementarity with existing plans and instruments.** Consequently, there is the need to formulate a general strategy of integration and dialogue with the urban planning instruments in force at the various scales and with the various sector plans. The future LACAP will have to constitute an integrative and corrective level of the transformation and protection policies of the urban landscape of Mantova. The LACAP may act as a layer connecting the various sector plans, through landscape as a linking key, with particular reference to the connections with:
 - the new Landscape Plan: relevant in-depth studies to be carried out at higher scales. Possibility that the plan contributes to influence the criteria of attribution of the classes of landscape sensitivity.
 - the PGT (urban land management plan) under revision, the maintenance of its knowledge framework, and its monitoring.
 - all the relevant sector plans: mobility, vegetation and green areas, energy etc.



- the CAP and biodiversity and landscape quality goals.
- the emergency management plan, for what concerns earthquakes, extreme events and severe climate conditions, etc.

Systemic actions on a broad territorial scale

- **Strengthening the ecological network**

The plan will have to act on the existing ecological network by promoting actions aimed at strengthening it and recreating/mending /implementing it where necessary. The LACAP should take advantage of the opportunities related to the potential synergies with the new multifunctional green network under definition by the Lombardy region, based on the ecologic network and its further development with reference to cultural, naturalistic and agricultural aspects. The network is drawn at the regional level and will need to be detailed at the municipal level. The LACAP should deal with this point, addressing the multi-functionality of these networks and the related ecosystem services and resilience also in a social key, also focusing on the development of the finer elements of the network that have been becoming poorer and poorer over time.

- **Urban regeneration and green systems**

The LACAP should aim at promoting urban regeneration (including densification, if/where possible), at increasing the quantity and quality of green areas and green systems (including vertical green), and at improving the resilience of areas under development (industrial areas, etc.).

- **Promote a conscious and sustainable water management**

"If water changes, Mantova changes". The future plan will have to address the theme of water and its management, enhancing the systemic and multi-semantic declinations with respect to the landscape. Water must be conceived primarily as a precious resource. Water management must be understood by the plan as an important preventive and defense strategy against hydrogeological risk; as an identifying character of the urban landscape; as a resource for the production of new services including tourism. Water management can affect water quality, impacting on the aesthetics and amenity values of the river and lake, and thus on the tourism sector.

- **Promote sustainable land use**

The LACAP should promote a zero soil consumption scenario, improve the quality of urban soils to increase resilience and limit hydrogeological risks, and define strategies to improve soil permeability;

Systemic actions on the urban scale

- **Work on public space to increase resilience**

The network of urban public spaces can also become a laboratory for the experimentation of new technological and compositional solutions, working on pavings and on green systems (trees, shrubs, turfgrass) of the roads, on the choice of materials, on water disposal and collection devices, lighting, etc.

- **Rethink urban mobility with greater regard to public mobility.** To encourage the use of public transport and multimodality in order to promote greater use of bicycles.

Systemic actions on the built heritage

- **Promote targeted actions on the built heritage.** The LACAP should promote the implementation of a program aimed at increasing the energy efficiency of public and private

buildings, to improve their performance and contribute to limiting energy consumption. The contents of the LACAP must also provide complementary guidelines and tools to promote and encourage urban regeneration interventions.

Awareness raising, education and communication.

The LACAP should include adequate communication and raising awareness strategies on the subject of climate change, so that the adaptation strategies are understood by the citizens. This kind of educational and informative action plays a crucial role since it lays the necessary foundations for the development of a collective critical awareness related to the theme of landscape adaptation.

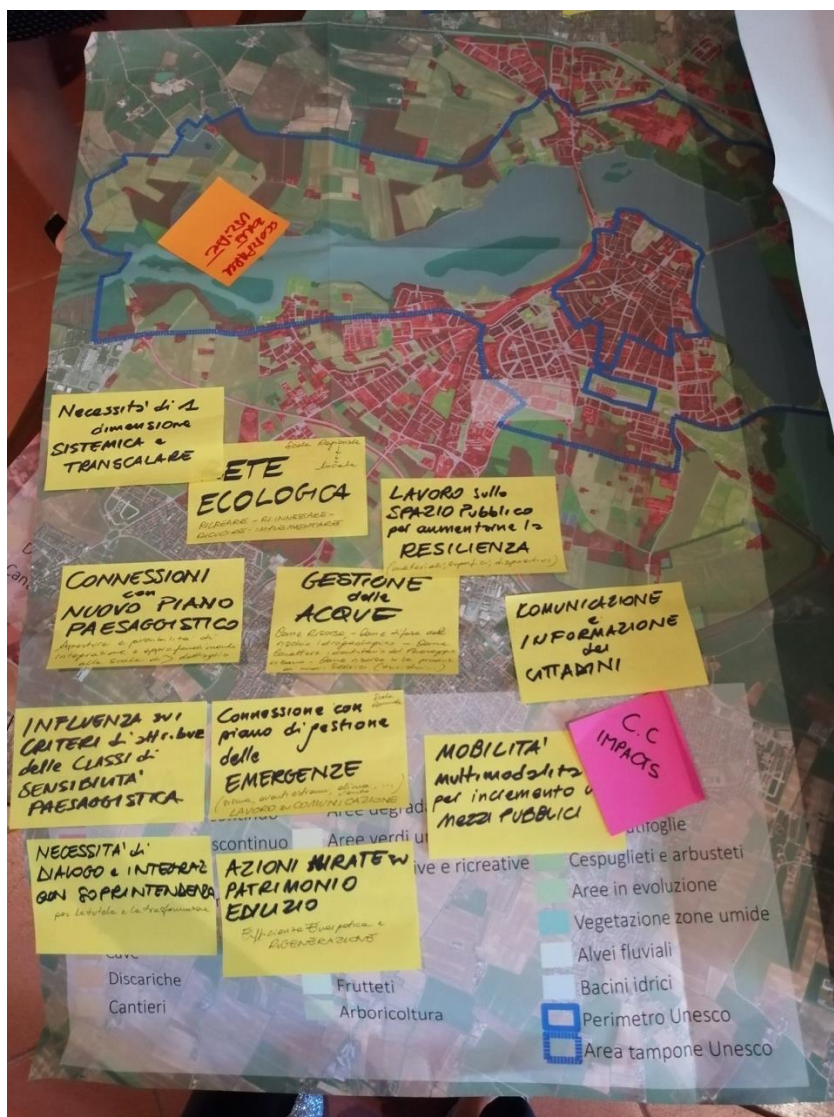
- Promote campaign to raise citizens' awareness on climate change issues.
- Promote an educational project that is suitable for various types of users (both for schools, professionals, and adults in general).
- Provide an adequate continuous communication strategy.

Summary of Results:

The local stakeholders have proved to participate in the discussion actively intervening and identifying both the problems caused by climate change and the possible strategies to cope with them. The fruitful discussion and good interaction has allowed to identify a list of impacts and key issues and proposals for the creation of the future LACAP.

Picture(s) of the activity, presentation, raw outputs, etc.







SUMMARY:

- Participants agree on being part of the local network of stakeholders;
- Participants agree on being updated on the project's phases and development;
- Participants agree on using their logos on the project website;
- Participants confirm their interest in being involved in a future project for the definition of the LACAP;
- Level of Achievement of the expected outcomes: 5 out of 5.
- Main Shortcomings or barriers for the full achievement of the expected outcomes: no barriers emerged during the workshop. Participants were proactive and sensitive to the topic.
- Main Reasons for the successful achievement of the expected outcomes: climate change regularly affect stakeholders' daily activities both from a personal and professional perspective. They probably perceive the urgency to tackle the challenge and to create a network of actions.
- Learnt lessons and recommendations for similar activities in the same place/other places: stakeholders have showed a great interest in sharing their own experience and have highlighted the availability to participate to AELCLIC project. Opportunity of deepening specific aspects of synergy between public bodies at different levels, and of strengthening synergies between public and private stakeholders.
- Level of influence of the local characteristics (social, geographical, etc.) in the development of the activity: 5 out of 5.

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