



# **AELCLIC Pathfinder project DELIVERABLE 3**

**Programmatic documents or inputs  
for future LACAPs**

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**Climate-KIC**

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### **WP2 Northern Europe**

Report of the 3<sup>rd</sup> Workshop\_Malmi District Center (Helsinki, FI), leading landscape

Report of the 3<sup>rd</sup> Workshop\_Hyppänjoki Valley (FI), multiplier landscape

Report of the 3<sup>rd</sup> Workshop\_Tornio River Valley (FI), multiplier landscape

### **WP3 Atlantic-Alpine Europe**

Report of the 3<sup>rd</sup> Workshop\_Holland Lowland Peat Landscape (NL), leading landscape

Reports of the 1<sup>st</sup>-2<sup>nd</sup> and 3<sup>rd</sup> Workshops\_Bertra Dunes System (IR), multiplier landscape

Report of the 3<sup>rd</sup> Workshop\_Haute Tarentaise Valley (FR), multiplier landscape

### **WP4 South Western Europe**

Report of the 2<sup>nd</sup> Workshop\_Huerta De Valencia-Alboraya (ES), leading landscape

Report of the 2<sup>nd</sup> Workshop\_Riu Besòs\_Barcelona Metropolitan Area (ES), multiplier landscape

Report of the 2<sup>nd</sup> Workshop\_La Mata-Torreveja (ES), multiplier landscape

Report of the 2<sup>nd</sup> Workshop\_Parc Natural De L'Alt Pirineu (ES), multiplier landscape

Report of the 2<sup>nd</sup> Workshop\_Serres D'Ancosa (ES), multiplier landscape

### **WP5 South-Eastern Europe**

Report of the 2<sup>nd</sup> Workshop\_Bologna North -Eastern urban fringe (IT), leading landscape

Report of the 2<sup>nd</sup> Workshop\_Mantova City Center (IT), multiplier landscape

Report of the 1<sup>st</sup> Workshop\_Giarre-Etna Landscape (IT), multiplier landscape

Report of the 1<sup>st</sup> Workshop\_Carol Park & Filaret-Rahova neighborhood (Bucharest, RO), multiplier landscape

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## Introduction

The AELCLIC-Pathfinder project defines, tests and disseminates proactive and catalysing models for the configuration of regional/local consortia with the social, financial, administrative and technical capacity to co-define in the future Landscape Adaption Plans to Climate Change (LACAPs hereafter). The present deliverable provides an overview of all the “programmatic documents or inputs” for future Landscape Adaptation Plans to Climate change (LACAPs)” developed and agreed between all the members of each local network. The AELCLIC project, as a pathfinder project, among other results has developed an integrated and inclusive path to inform and enable administrations, stakeholders and citizens in general, to adapt and integrate the policies and planning tools in force with strategies and indications regarding landscape adaptation to climate change or to generate new ones focused in Landscape Adaptation to Climate Change. This has been done in an innovative way according to a systemic and common perspective of the landscape, which plays the essential role of interface both to analyse and to prefigure shared scenarios of sustainable adaptation to the new conditions imposed by the climate change. The results of the pathfinder process, conducted by AELCLIC in parallel in each pilot case, have been condensed into “programmatic documents or inputs” for Landscape Adaptation Plans to Climate change, which indicate the structure that future plans for adapting landscapes to climate change might have. They include the agreed goals, the main themes, the implementation plans and the structures defined so far as well as the contribution, commitment and role of each member of the local network in this endeavour. This deliverable presents a descriptive synthesis of these plans, in the various forms they have assumed in the various pilot landscapes of the project.

The first chapter describes the key contents and structures of the LACAPs developed in each work package and highlighting particularly important aspects characterizing the different documents of each pilot landscape. For ease of consultation, it is divided into 4 sub-chapters, each one dedicated to a specific work package.

The conclusions of this deliverable provide a final reflection on the nature and potential of this tool, in order to prefigure the scalability and exportability of the AELCLIC experience. After the critical-comparative analysis carried out on the various LACAPs in the different work packages, the conclusions also develop a synthetic evaluation of the extent of LACAPs’ impact on the local/regional governance, about their integration with the EU directives and regional and/or local planning, and influence on society.

The appendix contains all the reports and the materials produced during the AELCLIC project in each pilot landscape, which relate to the illustration of the planning documents of the LACAPs.

It is divided into four sections according to the relevant AELCLIC Work Packages (WP):

- WP2: Northern Europe
- WP3: Atlantic and Alpine Europe
- WP4: South-Western Europe
- WP5: South-Eastern Europe

This deliverable is also displayed in the WEB of the project (<https://aelcllicpathfinder.com/>).

## Programmatic Documents or Inputs for future LACAPs.

The AELCLIC project has proved capable of producing the programmatic documents or inputs for the future preparation of the LACAPs in each one of the 15 pilot landscapes. The different structures and specific subjects/features of these documents faithfully reflect the process carried out in each context, that has been always influenced by a combination of important factors. These main factors are the cultural context, the level of knowledge of the local network with respect to climate change issues, the level of updating of the policies and the governance system in this regard, the direct involvement of the administrations in charge in the project, the perceived magnitude and severity of the effects of climate change on the pilot landscapes, the composition of each single network and, finally, the facilitation processes developed during the AELCLIC project in each Pilot Landscape and with each Local Network.

### Work Package 2 | Northern Europe

The programmatic documents or inputs for the LACAPs in the work package 2, Northern Europe, show the completion of AELCLIC project in a shared, consistent and synthetic way. The process has been characterized by a good homogeneity in all the pilots as the methods employed and tested in the leading and in the multiplier landscapes, have proven to be effective. All the local networks have been able to develop and agree on the key contents and structure for the future LACAP, precisely identifying the main goals, the themes, the opportunities, the solutions/actions, but also the expected impacts and the actual barriers. This systematic approach to identify problems and foresee shared solutions has been repeated for every pilot landscape by employing clear guidelines and effective methods, and reflects the design thinking that connotes the AELCLIC landscape approach as well as the importance of accurate critical revisions and synthesis phases that followed each collective work (workshops 1, 2 and 3). All the proposed structures for a LACAP provide the key contents and, depending on the Pilot Landscape, some interesting elements, such as the attitudes/ways-of-thinking to be promoted by the LACAP and the shared landscape values, which have been deemed necessary to inform the future LACAPs. Moving from this accurate framing, the final articulations and typology of the LACAPs could then be properly adapted to each regulatory and planning framework as the process to build the LACAPs has been properly defined and has considered the most relevant existing planning frameworks.

#### PRELIMINARY CONTENTS, PROCESS & ACTORS OF A LANDSCAPE ADAPTATION PLAN FOR CLIMATE CHANGE (MALMI DISTRICT (HELSINKI))

VALUES/ GOALS	THEMES/TOPICS	EXPECTED IMPACTS	OPPORTUNITIES	SOLUTIONS/ACTIONS	BARRIERS
<b>GOALS FOR CLIMATE CHANGE MITIGATION:</b> <ul style="list-style-type: none"> <li>SUSTAINABLE MOBILITY &amp; TRANSPORT</li> <li>COMPACT AND LIVELY NEIGHBOURHOODS</li> <li>DIFFERENT URBAN FABRICS AND DIVERSE COMMUNITY</li> <li>UPGRADING MALMI IMAGE AND IDENTITY</li> <li>GREEN-BLUE INFRASTRUCTURE</li> </ul> <b>GOALS FOR CLIMATE CHANGE ADAPTATION &amp; MITIGATION:</b> <ul style="list-style-type: none"> <li>ADAPTATION OF BUILDINGS, INFRASTRUCTURES AND OPEN SPACES</li> <li>COMPACT, MULTIFUNCTIONAL AND LIVELY NEIGHBOURHOODS</li> <li>ADAPTATION AND IMPROVEMENT OF GREEN INFRASTRUCTURE, GREEN FACTORS AND ECOSYSTEM SERVICES</li> <li>PROMOTION OF URBAN AND CULTURAL DIVERSITY AND CONSIDERATION OF HISTORICAL LAYERS</li> <li>FLEXIBLE AND DEMOGRAPHICALLY BALANCED DISTRICT</li> <li>STORM WATER MANAGEMENT AND SOIL PERMEABILITY</li> </ul>	<b>THEMES FOR CLIMATE CHANGE MITIGATION:</b> <ul style="list-style-type: none"> <li>SUSTAINABLE MOBILITY</li> <li>CIRCULAR ECONOMY</li> <li>FLEXIBILITY AND TRANSPARENCY</li> </ul> <b>THEMES FOR CLIMATE CHANGE ADAPTATION &amp; MITIGATION:</b> <ul style="list-style-type: none"> <li>SUSTAINABLE FLUIT AND NATURAL ENVIRONMENT</li> <li>SOCIAL SUSTAINABILITY, WELLBEING, AND SUSTAINABLE WAYS OF LIVING</li> <li>GREEN-BLUE AND BIODIVERSE INFRASTRUCTURES</li> </ul>	<b>IMPACTS FOR CLIMATE CHANGE MITIGATION:</b> <ul style="list-style-type: none"> <li>FUNCTIONALITY OF URBAN SPACE, PUBLIC SPACE AND URBAN STRUCTURE</li> <li>VITALITY OF LOCAL ECONOMY</li> <li>EFFECT OF URBAN DENSIFICATION</li> </ul> <b>IMPACTS FOR CLIMATE CHANGE ADAPTATION AND MITIGATION:</b> <ul style="list-style-type: none"> <li>SUSTAINABLE BUILT AND NATURAL ENVIRONMENT</li> <li>SOCIAL SUSTAINABILITY, WELLBEING, AND SUSTAINABLE WAYS OF LIVING</li> <li>GREEN INFRASTRUCTURE AND BIODIVERSE INFRASTRUCTURES</li> </ul> <b>IMPACTS FOR CLIMATE CHANGE ADAPTATION:</b> <ul style="list-style-type: none"> <li>PSYCHOLOGICAL AND PHYSICAL HEALTH</li> <li>WELLBEING AND SOCIAL &amp; CULTURAL DIVERSITY</li> <li>FUNCTIONALITY OF EXISTING BUILDINGS</li> <li>STORM WATER MANAGEMENT AND EFFECT OF DENSIFICATION</li> <li>QUALITY AND FUNCTIONALITY OF GREEN-BLUE INFRASTRUCTURE/SPACES</li> <li>IMAGE OF THE DISTRICT</li> </ul>	<b>OPPORTUNITIES FROM CLIMATE CHANGE MITIGATION:</b> <ul style="list-style-type: none"> <li>INTRODUCTION OF NEW TECHNOLOGIES &amp; MOBILITY SYSTEMS</li> <li>IMPROVEMENT OF URBAN STRUCTURE, OPEN SPACES &amp; BUILDINGS</li> <li>NEW WAYS OF LIVING</li> <li>MALMI BECOMES A REFERENCE IN CLIMATE CHANGE MITIGATION (Carbon Neutral District)</li> </ul> <b>OPPORTUNITIES FROM CLIMATE CHANGE ADAPTATION AND MITIGATION:</b> <ul style="list-style-type: none"> <li>TRANSFORMATION OF LOCAL ECONOMY (GREENER &amp; MORE CIRCULAR)</li> <li>GENERATION OF A MORE COMPROMISED, SAFE &amp; LIVELY DISTRICT</li> <li>IMPROVEMENT OF BLUE-GREEN INFRASTRUCTURE</li> <li>IMPROVEMENT OF PUBLIC SPACES &amp; SERVICES</li> <li>SOIL, WATER, AND ECOLOGY GAIN RELEVANCE IN PLANNING AGENDAS</li> <li>SMALL CHANGES PROMOTE A BIGGER &amp; SYSTEMIC CHANGE</li> </ul>	<b>SOLUTIONS/ACTIONS FOR CLIMATE CHANGE MITIGATION:</b> <ul style="list-style-type: none"> <li>DENSIFICATION</li> <li>CENTRALIZATION</li> <li>NEW MOBILITY SYSTEMS</li> <li>DESIGN OF THE PUBLIC SPACE</li> <li>UPGRADING OLD BUILDINGS</li> </ul> <b>SOLUTIONS/ACTIONS FOR CLIMATE CHANGE ADAPTATION AND MITIGATION:</b> <ul style="list-style-type: none"> <li>CLIMATE CHANGE FRIENDLY AND FLEXIBLE URBAN PLANNING AND DESIGN</li> <li>ADJUSTMENT AND IMPROVEMENT OF GREEN-BLUE INFRASTRUCTURES, GREEN FACTORS AND ECOSYSTEM SERVICES (e.g. in the Langinkallio valley, natural meadows)</li> <li>UPGRADING OLD BUILDINGS &amp; INFRASTRUCTURES</li> <li>FINANCIAL SUPPORT FOR IMPLEMENTING ADAPTATION ACTIONS</li> <li>NEW MOBILITY SYSTEMS AND PRACTICES: Public transport, shared vehicles, carpooling</li> <li>NEW HYBRID BUILDINGS AND INFRASTRUCTURES</li> </ul>	<b>BARRIERS FOR CLIMATE CHANGE MITIGATION:</b> <ul style="list-style-type: none"> <li>MONEY AND RESOURCES</li> <li>UNCERTAINTY ABOUT NEW TECHNOLOGIES</li> <li>RESISTANCE AND FEAR TO CHANGE</li> </ul> <b>BARRIERS FOR CLIMATE CHANGE ADAPTATION AND MITIGATION:</b> <ul style="list-style-type: none"> <li>MONEY AND RESOURCES</li> <li>LAND OWNERSHIP: FRAGMENTATION AFFECTS CHANGES &amp; MAINTENANCE</li> <li>RESISTANCE AND FEAR TO CHANGE</li> <li>CLIMATE CHANGE IS NOT INCLUDED IN PLANNING</li> <li>INCREASE OF POPULATION</li> </ul>

## PRELIMINARY CONTENTS for a potential LANDSCAPE ADAPTATION PLAN FOR CLIMATE CHANGE in the Hyypä River Valley (#=adaptation; @=mitigation)

ATTITUDES	THEMES	EXPECTED IMPACTS	OPPORTUNITIES	SOLUTIONS/ACTIONS	BARRIERS
<ul style="list-style-type: none"> <li>CO-OPERATION</li> <li>ENTREPRENEURSHIP</li> <li>POSITIVITY</li> </ul>	<ul style="list-style-type: none"> <li>AGRICULTURE, FORESTRY, NATURAL ENVIRONMENT &amp; RURAL TRADES (#, @)</li> <li>PEOPLE, WAYS OF LIVING &amp; ENERGY (#, @)</li> <li>PLANNING, BUILT ENVIRONMENT &amp; INFRASTRUCTURES (#, @)</li> </ul>	<p><b>ON AGRICULTURE, FORESTRY, NATURAL ENVIRONMENT AND RURAL TRADES</b></p> <ul style="list-style-type: none"> <li>IN TOURISM</li> <li>IN AGRICULTURE, CATTLE BREEDING AND FORESTRY</li> <li>IN NATURAL ECOSYSTEMS</li> <li>IN RURAL ECONOMY AND RURAL TRADES</li> <li>IN CARBON EMISSIONS</li> <li>IN LANDSCAPE</li> </ul> <p><b>ON PEOPLE, WAYS OF LIVING &amp; ENERGY</b></p> <ul style="list-style-type: none"> <li>IN ENERGY CONSUMPTION</li> <li>IN NEW ENERGY SOURCES</li> <li>IN CARBON EMISSIONS</li> <li>IN ECONOMIC ACTIVITIES</li> </ul> <p><b>ON PLANNING, BUILT ENVIRONMENT &amp; INFRASTRUCTURES</b></p> <ul style="list-style-type: none"> <li>IN THE LANDSCAPE</li> <li>IN THE OBJECTIVES OF LAND USE PLANNING</li> <li>IN THE FUNCTIONALITY OF EXISTING AND NEW BUILDINGS</li> <li>IN PERSONAL LIFE AND SAFETY</li> <li>IN INFRASTRUCTURE AND MOBILITY</li> </ul>	<p><b>IN AGRICULTURE, FORESTRY, NATURAL ENVIRONMENT AND RURAL TRADES</b></p> <ul style="list-style-type: none"> <li>DIGITAL SOCIETY</li> <li>DEVELOPMENT OF BETTER AGRICULTURAL PLANS</li> <li>INCREASE OF GREEN ECONOMY</li> <li>AGRICULTURE AS A SOLUTION TO CLIMATE CHANGE</li> <li>CATTLE BREEDING IS LESS SENSITIVE</li> </ul> <p><b>IN PEOPLE, WAYS OF LIVING &amp; ENERGY</b></p> <ul style="list-style-type: none"> <li>RENEWABLE ENERGIES</li> <li>NEW ENERGY AND TRANSPORT</li> <li>NEW ENERGY SOURCES DIGITAL SOCIETY</li> <li>NEW INHABITANTS</li> </ul> <p><b>IN PLANNING, BUILT ENVIRONMENT &amp; INFRASTRUCTURES</b></p> <ul style="list-style-type: none"> <li>RETRO-SPATIAL AND LAND-USE PLANNING</li> <li>NEW ARCHITECTURE</li> </ul>	<p><b>SOLUTIONS/ACTIONS FOR AGRICULTURE, FORESTRY, NATURAL ENVIRONMENT AND RURAL TRADES</b></p> <ul style="list-style-type: none"> <li>RESTORING/AVOIDING NATURAL ENVIRONMENTS (E.G. RIVER, RECREATIONAL ROUTES, MIXED FORESTS, ETC.)</li> <li>CARBON SEQUESTRATION THROUGH AGRICULTURE &amp; FORESTS</li> <li>NEW AGRICULTURAL TECHNIQUES (DRAINAGE, SOIL MANAGEMENT, CROP ROTATION, MEADOWS)</li> <li>ORGANIC FARMING</li> <li>MONITORING LANDSCAPE MAINTENANCE</li> <li>SOIL AND GROUNDWATER RESEARCH &amp; IMPROVEMENTS</li> <li>IMPROVING AND DEVELOPING NEW TOURISM SERVICES</li> <li>MORE INFORMATION AND MORE INNOVATIONS</li> </ul> <p><b>FOR PEOPLE, WAYS OF LIVING &amp; ENERGY</b></p> <ul style="list-style-type: none"> <li>TOWARDS A CARBON NEUTRAL HYYPÄ RIVER VALLEY</li> <li>SUSTAINABLE &amp; GREEN ECONOMY + SHARING ECONOMY</li> <li>FINANCING GOOD PROJECTS</li> <li>PROMOTING HEALTH AND WELLBEING</li> <li>REVITALIZATION OF TRADITIONS</li> <li>NEW TECHNOLOGIES: ENERGY, REMOTE WORK, ETC.</li> <li>MORE INFORMATION AND MORE INNOVATIONS</li> <li>MORE COMMUNICATION &amp; MARKETING</li> </ul> <p><b>FOR PLANNING, BUILT ENVIRONMENT &amp; INFRASTRUCTURES</b></p> <ul style="list-style-type: none"> <li>NEW BUILDING REGULATIONS</li> <li>NEW AGRICULTURAL PRACTICES &amp; PLANS</li> <li>TECHNICAL AND DIGITAL DEVELOPMENT</li> <li>JOINT USE, SHARED VEHICLES AND SHARING ECONOMY</li> <li>NEW STRATEGY FOR THE NATURAL ENVIRONMENT &amp; NEW RECOMMENDATIONS FOR LANDSCAPE MAINTENANCE</li> <li>DEVELOPMENT OF TRAFFIC SERVICES, LANDSCAPE ROUTES</li> <li>MORE INFORMATION AND MORE INNOVATIONS</li> </ul>	<p><b>BARRIERS</b></p> <p><b>IN AGRICULTURE, FORESTRY, NATURAL ENVIRONMENT AND RURAL TRADES</b></p> <ul style="list-style-type: none"> <li>LACK OF READY INNOVATION SOLUTIONS</li> <li>MONEY &amp; RESOURCES (COST-EFFECTIVENESS)</li> </ul> <p><b>IN PEOPLE, WAYS OF LIVING &amp; ENERGY</b></p> <ul style="list-style-type: none"> <li>LACK OF INFORMATION</li> </ul> <p><b>IN PLANNING, BUILT ENVIRONMENT &amp; INFRASTRUCTURES</b></p> <ul style="list-style-type: none"> <li>BUREAUCRACY</li> </ul>

## PRELIMINARY CONTENTS for a potential LANDSCAPE ADAPTATION PLAN FOR CLIMATE CHANGE in the Tornio River Valley

VALUES	THEMES	EXPECTED IMPACTS	OPPORTUNITIES	SOLUTIONS/ACTIONS	BARRIERS
<ul style="list-style-type: none"> <li>ON THE PEACEFUL BORDER IN THE NORTH</li> <li>CULTURE AND NATURE</li> <li>TRANSPARENCY</li> <li>SUSTAINABILITY</li> <li>SAFETY</li> </ul>	<ul style="list-style-type: none"> <li>TWIN CITY BY THE RIVER, THE SEA AND THE ARCHIPELAGO</li> <li>CULTURAL ENVIRONMENT, PEOPLE AND WAYS OF LIVING (LIFE IN THE NORTH)</li> <li>WATER SYSTEM, FLOODS AND TORNIO RIVER</li> <li>SUSTAINABLE ECONOMY</li> <li>SUSTAINABLE ENVIRONMENT</li> <li>IMPROVING ENERGY PRODUCTION AND USE</li> </ul>	<p><b>ON TWIN CITY BY THE RIVER, THE SEA AND THE ARCHIPELAGO</b></p> <ul style="list-style-type: none"> <li>TOURISM</li> </ul> <p><b>ON CULTURAL ENVIRONMENT, PEOPLE AND WAYS OF LIVING (LIFE IN THE NORTH)</b></p> <ul style="list-style-type: none"> <li>ENERGY</li> <li>PEOPLE &amp; SOCIO-CULTURAL STRUCTURE</li> <li>WAYS OF LIVING, TOURISM AND SUMMERS</li> <li>HEALTH &amp; SAFETY</li> </ul> <p><b>ON WATER SYSTEM, FLOODS AND TORNIO RIVER</b></p> <ul style="list-style-type: none"> <li>FLOODS AND DAMAGES</li> <li>SEASONAL CHANGES, SNOW, SOILS AND RIVER</li> <li>BUILDINGS, CONSTRUCTIONS AND INFRASTRUCTURES</li> <li>TIME SCALE AND SPEED OF CHANGE?</li> <li>RIVER ECOLOGY AND ECOSYSTEMS</li> </ul> <p><b>ON SUSTAINABLE ECONOMY AND ENVIRONMENT</b></p> <ul style="list-style-type: none"> <li>AGRICULTURE &amp; FORESTRY</li> <li>FISHES AND FISHING</li> <li>WATER QUALITY, QUANTITY &amp; DROUGHTS</li> <li>ALIEN SPECIES, DISEASES AND PESTS</li> <li>RIVER ECOSYSTEMS &amp; FISHING</li> <li>LANDSCAPE CHANGES: RIVER, FARMING, ROADS, BUILDINGS</li> </ul> <p><b>ON ENERGY PRODUCTION AND USE</b></p> <ul style="list-style-type: none"> <li>EXISTING INFRASTRUCTURES &amp; SAFETY</li> </ul>	<p><b>IN TWIN CITY BY THE RIVER, THE SEA AND THE ARCHIPELAGO</b></p> <ul style="list-style-type: none"> <li>SUMMER TOURISM</li> </ul> <p><b>IN CULTURAL ENVIRONMENT, PEOPLE AND WAYS OF LIVING (LIFE IN THE NORTH)</b></p> <ul style="list-style-type: none"> <li>NEW CLIMATE AND REDISTRIBUTION OF SPECIES</li> <li>AGRICULTURE &amp; FORESTRY</li> <li>RESTORATION OF RIVER BASIN AND RURAL OPENNESS</li> <li>TOURISM</li> <li>NEW PEOPLE &amp; SOCIO-CULTURAL STRUCTURE</li> </ul> <p><b>IN WATER SYSTEM, FLOODS AND TORNIO RIVER</b></p> <ul style="list-style-type: none"> <li>LESS ICE DAM FLOODS &amp; MORE FLOOD CONTROL</li> <li>RIVER ECOSYSTEMS AND FISHING</li> </ul> <p><b>IN SUSTAINABLE ECONOMY AND ENVIRONMENT</b></p> <ul style="list-style-type: none"> <li>GREEN ECONOMY</li> <li>MORE NUTRIENTS AND SOIL FERTILITY</li> </ul> <p><b>IN ENERGY PRODUCTION AND USE</b></p> <ul style="list-style-type: none"> <li>ECONOMIC DEVELOPMENT</li> <li>NEW TECHNOLOGIES</li> </ul>	<ul style="list-style-type: none"> <li>LAND USE AND CONSTRUCTION MANAGEMENT AND CONTROL &gt; SUSTAINABLE AND CONSERVING BUILDING</li> <li>REDUCTION OF THE EMISSIONS OF SUBSTANCES HAZARDOUS TO THE ENVIRONMENT</li> <li>IMPROVED AGRICULTURE</li> <li>RESEARCH</li> <li>STORM WATER CONTROL/DELAY</li> <li>FLOOD WALLS</li> <li>PROTECTION OF RIVER SIDES</li> <li>FLOOD CONTROL</li> <li>DEVELOPMENT OF ENVIRONMENTAL PROGRAMS</li> <li>INCENTIVES, TAXATION, CERTIFICATION FOR INDUSTRY AND OTHER COMPANIES</li> </ul>	<ul style="list-style-type: none"> <li>POLITICS</li> <li>EU-DIRECTIVES</li> <li>REGULATIONS /RESTRICTIONS FOR FISHING AND AGRICULTURE</li> <li>LACK OF RESOURCES, NEW IDEAS</li> <li>NEW THINKING AND PEOPLE, YOUNG PEOPLE NEEDED!</li> <li>MONEY AND RESOURCES, LACK OF TIME</li> <li>WEAK INVOLVEMENT OF PRIVATE AND PUBLIC SECTOR</li> <li>ARE WE MISSING OUR CULTURE IDENTITY?</li> <li>EXISTING STRUCTURES AND SYSTEMS (FOR EX. THE FOSSIL FUELS)</li> </ul>

**Fig. 1 |** Composition of the three structures of potential LACAP elaborated in WP2-Northern Europe. *Preliminary contents for a potential landscape adaptation plan for climate change in Malmi district, in Hyypä River Valley and in Tornio River Valley* (See Appendix WP2 for further information). These tables can provide a valuable bottom-up input for the definition of the final structure of a future LACAP.

The search for integration with local policies and plans for adaptation to climate change, as well as the link to EU directives, has particularly marked the activity carried out in the whole Work Package, where regional and local administrations have proved immediately very receptive and supportive with respect to the inputs and results of the project. In each of the three pilots the strategic plans in force or ongoing, as well as the more specific planning or regulatory tools regarding climate adaptation, have played both the role of reference for the analysis and envisioning activity, and of interesting and desirable "beneficiaries" of the final results of the AELCLIC process. This, for instance, happened in the district of Malmi, where the *Helsinki Programme For Climate Change Adaptation And Mitigation* and the *Malmi Vision* (Plan for the renovation of the Malmi District Center) have actually incorporated ideas produced in the AELCLIC activities (namely the Values, Goals, Themes and Actions were combined, and there were interesting influences on the structures of these planning instruments) testifying a high impact of AELCLIC activity in climate change Governance as well as a proof of legitimacy of the ideas produced by the local network within the AELCLIC Project. Regarding the implementation plan for the LACAPs, each context has reached a different level of formalization. It is ascertained that everywhere the AELCLIC project has correctly fulfilled its pathfinder objective by creating proactive and well-balanced networks, for which possibilities and ways of expansion have been also prefigured, and by acting as a trigger for a work that all pilot landscapes intend to concretize in the future.



On the one hand, in the Malmi district the City of Helsinki will be the leader and official representative of the Malmi\_AELCLIC-Network in future actions connected to the AELCLIC project (Climate-KIC) and a preliminary plan has been defined and shared, articulated in very precise phases, as follows:

- Expand the network including some crucial stakeholders
- Develop a deeper ad-hoc analysis to understand the Impacts and Opportunities of Climate Change in the district;
- Define more precisely specific Solutions, Actions and even pilot/demonstrative interventions;
- Provide the plan with an Implementation plan and a Monitoring Plan.

The whole development of a LACAP and its implementation should be accompanied with a Participation Process. On the other hand, in the rural contexts of Tornio and Hyvppä the interest and the direct involvement of the administrations (City of Tornio and city of Kauhajoki) is confirmed, however, at the moment, without a shared action plan defining the future operational phases.



**Fig. 2 |** Implementation plan for the LACAP and possible distribution of roles, duties, contributions,etc. in the Malmi district pilot landscape.

## Work Package 3 | Atlantic Alpine Europe

Within the work package 3, Atlantic and Alpine Europe, the planning documents for future LACAPs present a high degree of variety, both for the structure and contents, since they reflect a flexible and diversified approach able to cope with the huge differences and specificities of the considered pilot landscapes and the climate change governance in force. Structures that move from the identification of the problem to the definition of solutions capable of paying attention to the landscape quality, as it happens with the case of Holland Lowland Peat and Bertra dune system, alternate with examples that move directly from the identification of solutions, emphasizing the strategic approach and the centrality of a vision, in Haute Tarentaise.

The process that led to the identification of the main contents of the LACAP in these pilot cases has found its core in the envisioning phase and the analysis of network's needs and desiderata, with respect to the landscape of the near future. The prefiguration of shared scenarios takes place first through the dialogue and comparison between the singular visions expressed by the representatives of the network's interest groups. The systemic approach with which this phase of the process is conducted stimulates complex visions in which each stakeholder demonstrates a good level of awareness of her/his role as a landscape actor.

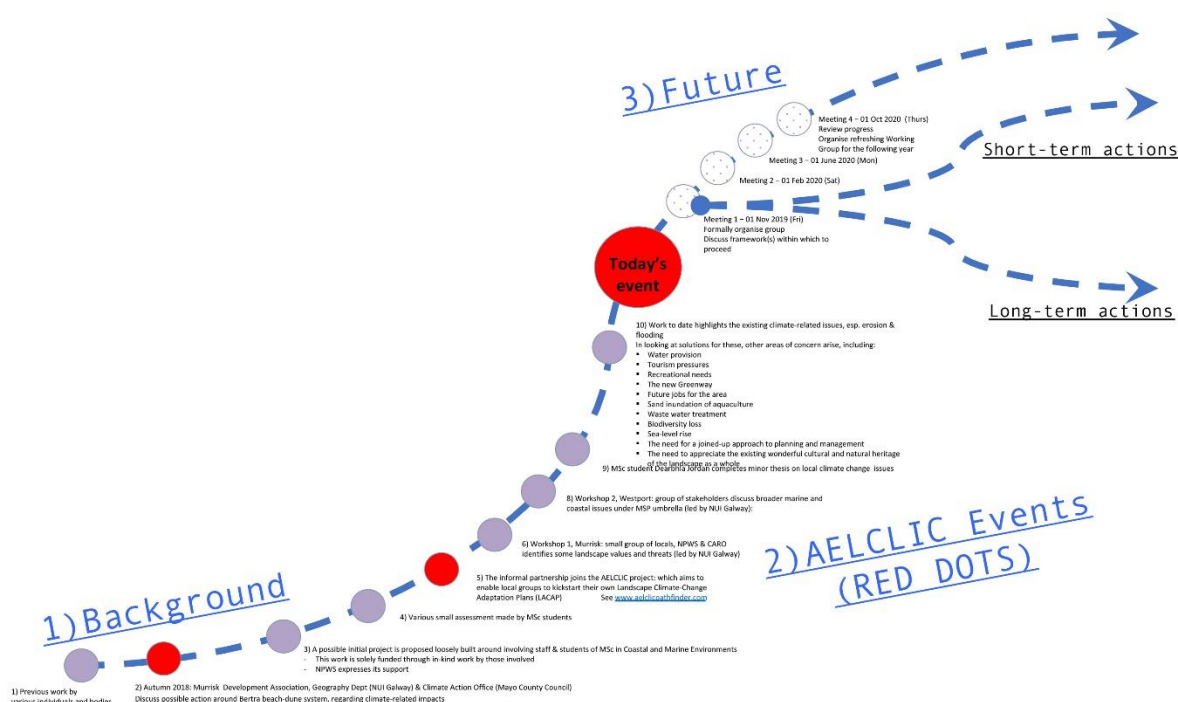
Then the clustering of the main shared themes for a future LACAP has allowed to define specific solutions and actions covering each point.

	 <b>Verstedelijking en gezonde leefomgeving</b>	 <b>Landbouw en natuur</b>	 <b>Landschap en recreatie</b>	 <b>Infrastructuur en vitale objecten</b>
 <b>WINTER OVERLAST</b>	<ul style="list-style-type: none"> <li>• Gevolgen afvoeren van (overtollig) water uit stedelijk gebied en opvangen in landelijk gebied inventariseren.</li> <li>• Klimaat robuust inbreiden en transformeren.</li> </ul>	<ul style="list-style-type: none"> <li>• Potentieel kwetsbare fruitteelt. Verdiepend onderzoek naar duur wateroverlast.</li> <li>• Tijdelijke waterberging op veengrond toestaan (grasland).</li> </ul>	<ul style="list-style-type: none"> <li>• Leidende principes voor inpassing van een klimaat robuust watersysteem.</li> </ul>	<ul style="list-style-type: none"> <li>• Aanpakken onbegaanbaarheid verbindingen en tunnels.</li> <li>• Robuuste netwerken gas, water, elektriciteit, internet.</li> <li>• Energie terugwinnen uit water.</li> </ul>
 <b>HITTE</b>	<ul style="list-style-type: none"> <li>• Watercirculatie inzetten voor verkoeling van het stedelijk gebied.</li> <li>• Operatie streembreek in stedenband.</li> <li>• Vergroenen kwetsbare verzorgingslocaties.</li> <li>• Klimaat robuust inbreiden en transformeren.</li> </ul>	<ul style="list-style-type: none"> <li>• Hittestress vee en planten.</li> </ul>	<ul style="list-style-type: none"> <li>• Aandacht voor zwemwaterlocaties ten aanzien van waterkwaliteit (blauwalg) en veiligheid (zwemmen in rivieren).</li> <li>• Bomen langs de wegen: 'linten' planten.</li> <li>• Groene rand langs stedenband en het groene hart inzetten voor verkoeling.</li> </ul>	<ul style="list-style-type: none"> <li>• Nadelige effecten op infrastructuur (spoor en bruggen) inventariseren en in kaart brengen.</li> </ul>
 <b>DROOGTE</b>	<ul style="list-style-type: none"> <li>• Regionale aanpak voor kwetsbare niet onderheide panden opstellen.</li> <li>• Rekening houden met toename in ontwikkelingskosten door bodemdaling.</li> </ul>	<ul style="list-style-type: none"> <li>• Mogelijkheden voor zoetwateraanvoer vergroten.</li> <li>• Gewasschade door watertekort beperken.</li> <li>• Meer onderzoek naar de onttrekking van water uit veen door bomen in natuurgebieden en stedelijk gebied.</li> <li>• Grootchalig onderzoek naar regiospecifieke oplossingen voor bodemdaling.</li> <li>• Waterkwaliteit verbeteren voor veedrenking.</li> </ul>	<ul style="list-style-type: none"> <li>• Link bodemdaling en weidevogelbeheer onderzoeken.</li> </ul>	<ul style="list-style-type: none"> <li>• Rekening houden met bodemdaling</li> <li>• Kabels en leidingen gevoelig voor zettingsverschillen.</li> </ul>
 <b>OVERSTROMING</b>	<ul style="list-style-type: none"> <li>• Stedenband ASH: Wat kan je voor een crisisfase aanpassen in de infrastructuur en bebouwing voor ontruiming en overleving? Onderzoek Meerlaagse Veiligheid (MLV) / Flood Resilient Areas by Multi-layer Safety (FRAMES).</li> </ul>	<ul style="list-style-type: none"> <li>• Levende have kwetsbaar bij overstroming. Evacuatie van levende have bij een overstroming is belangrijke factor.</li> </ul>	<ul style="list-style-type: none"> <li>• Oude linten en dijken inzetten voor hulpdiensten.</li> </ul>	<ul style="list-style-type: none"> <li>• Veilige uitvalswegen bij overstroming</li> <li>• Informatie: wat moeten we doen bij overstromingen?</li> <li>• Risicovolle industrie en aanwezigheid gevaarlijke stoffen. Hoe ga je hier mee om en hoe sla je deze op?</li> <li>• Nieuwe energie infra op hoogte aanleggen.</li> </ul>

**Fig. 3 |** Scheme developed in the framework of the Stress Test in the Holland Lowland Peat pilot landscape. In the matrix to the main (ordered) impacts correspond solutions and actions which in turn are ascribed to categories of actions (abscissa) aimed at guaranteeing the quality of the landscapes.

In these stages of envisioning, the activity focuses on strengthening the cohesion of the network. The definition of the contents of the LACAP becomes the tool through which the network identifies and legitimizes itself. Thus, all the local networks have been able to develop and agree on the key contents for the future LACAP, suitable for counterbalancing the main impacts that could alter the characters of their landscapes.

Each local network searched for the integration of the results of the AELCLIC project with the ongoing policies and climate adaptation plans. An example of such synergy can be found in the case of Holland Lowland Peat Landscape, where the LACAP implementation plan finds a perfect alignment with that of the Delta Plan on Spatial Adaptation (2018) and further visions and programs, such as Landbouwvisie Alblasserwaard-Vijfheerenlanden 2030; the "Green Deal Connect Area Deal" (<http://www.gebiedsdeal.nl>) and the vision developed by Rivierenland Water Board. A still different and important example in this sense is that of the pilot case of Bertra's dune system. Here the AELCLIC project has been included since the beginning of the process within an ongoing research project (promoted by Murrisk Development Association, Geography Dept of NUI Galway and Climate Action Office of the Mayo County Council) on the adaptation to climate change of this portion of territory exposed to severe threats. The project during its development foresaw a perfect fit and timing for a new national level initiative for regional to local action, helping with its programmatic document for a LACAP to determine both Short-Term and Long-Term Solutions, that will be further implemented during 2020.



**Fig. 4 |** Diagram describing the level of integration of the AELCLIC project with the policies and projects already in force at the local level and description of the phases of implementation of the work.

This level of implication demonstrates an excellent influence of the project on local governance with regard to climate change, also offering a perspective for the implementation of the project's outlines within the planning tools and consequently the legitimacy of the ideas and results produced within the AELCLIC process.

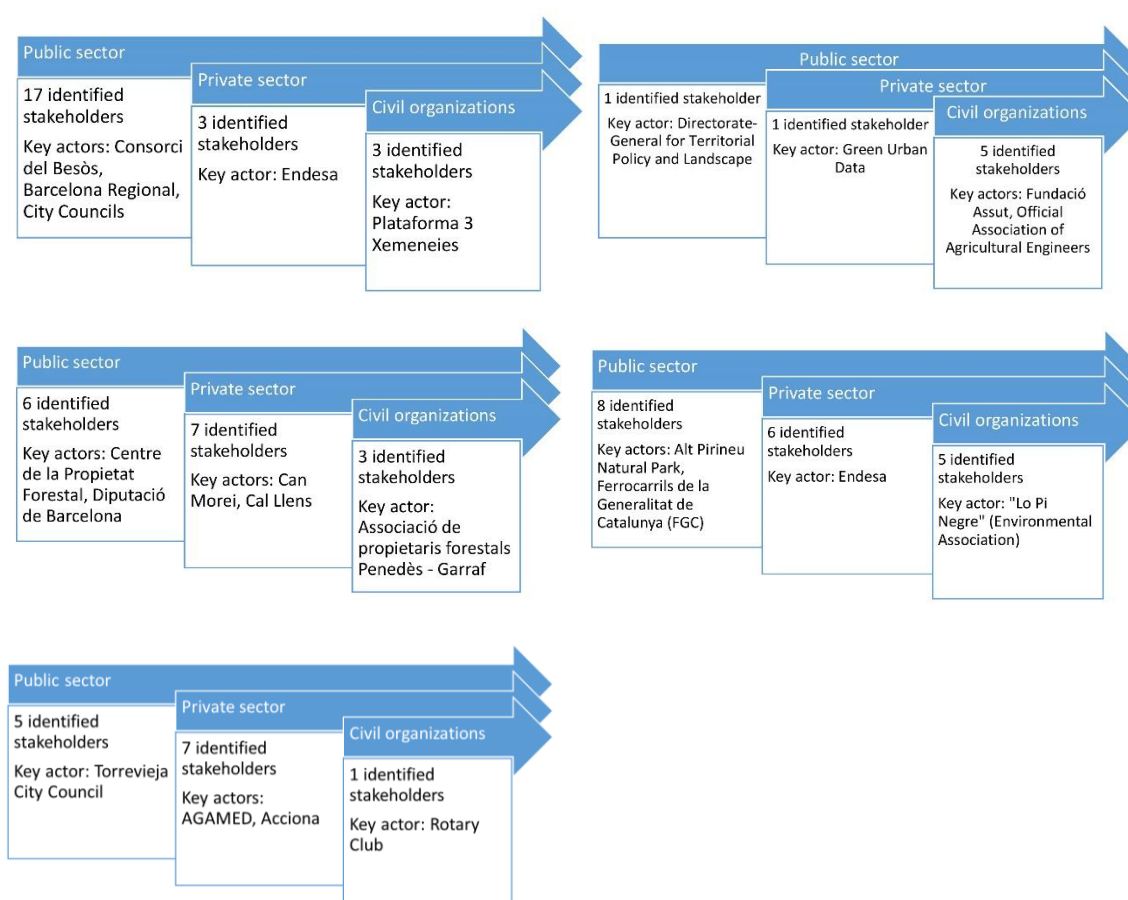
## Work Package 4 | South Western Europe

The LACAP's programmatic documents or inputs for the work package 4, South Western Europe, are the product of an adaptive and flexible approach with respect to the outlines of different contexts. The outcome of the process conducted by AELCLIC in the various pilot cases provided different results responding to the diversity of needs formulated, explicitly or implicitly, from every context of the work package. In fact, although the pilot cases are all concentrated in the Iberian Peninsula, they present a very high variety of landscapes and concerns to deal with. However, all the local networks have been able to develop and agree on the key contents for future LACAPs, precisely identifying main goals, themes, opportunities, solutions/actions, actual barriers and threats and even landscape values and expected climate change impacts. This synthetic approach to identify problems and co-define solutions, repeated in every pilot landscape by employing proven and inclusive methods, both for group work and for critical synthesis phases, reflects the design thinking as well as the participatory attitude that connotes the AELCLIC landscape approach. The AELCLIC process in this work package puts also a particular emphasis on "team building", by fostering the cohesion and making the most of the characteristics and potential of each group. The implementation plans of the AELCLIC project have in fact been mainly aimed at ensuring the integrity and stimulating the proactivity and potential continuity of the local networks. This choice, conducted homogeneously for all the pilot landscapes, testifies to the adaptive capacity of the pathfinder model to meet real needs and solve the main problems emerged from each landscape. It also demonstrates the importance



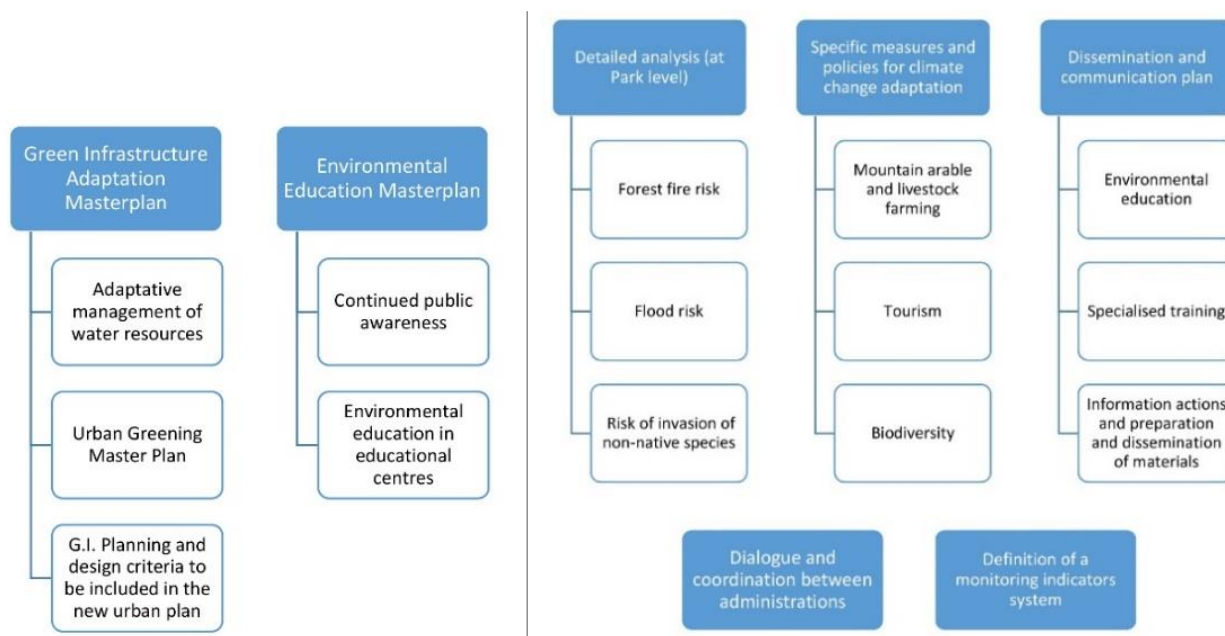
of ensuring full legitimacy of the local networks, ideas and results they produce so that they can continue to play an effective and autonomous role even after the pathfinder project is completed.

In this regard, a specific final activity was developed in every landscape to evaluate the potential levels of stakeholder involvement in the future development of a LACAP. Potential key stakeholders could be identified in this task even if they were not present at the workshop. Therefore, this stakeholder analysis aimed not only at assessing the potential interest and resources of the members of the local network to continue working beyond the AELCLIC project, but also to identify some potentially significant additions to the network. Approaching these potential new members with the previous endorsement of the existing local network, obtained via this activity, was also considered important to reinforce the appeal of the project to the potential entrants. Key actors for each of the established categories were also identified at a later stage based on their contributions during the AELCLIC workshops and in the Bologna International AELCLIC meeting, or their potential future involvement in the project (see fig. 5).



**Fig. 5 | Stakeholder analysis results.** (from top left: River Besòs, Huerta de Valencia-Alboraya, Serres d'Ancosa, Parc Natural de l'Alt Pirineu and La Mata - Torrevieja pilot landscapes).

All the produced planning documents provide the necessary elements to inform future LACAPs, focusing on detailed actions and solutions required to adapt the pilot landscapes to climate change and find the necessary coordination with planning instruments (see fig. 6). In this case, there are no direct or specific indications on the "structures" that these LACAPs will actually have to assume. However, it has been understood that the form of the plan will be the most suitable to guarantee an effective implementation of the provisions, rules and measures agreed, and, when applicable, in accordance with the regulations regarding the implementation of the specific legal instrument adopted for the LACAP.



**Fig. 6 |** Acting on commonly agreed objectives and issues, these diagrams present some possible system of integration of the LACAP results within the current and future planning instruments in la Mata-Torre Vieja (left) and Alt Pirineu Natural Park (right) pilot landscapes.

The search for integration with national, regional and local policies and plans for Climate Change adaptation, as well as the link to EU directives, to local and regional strategic plans and to masterplans (as the case of la Mata-Torre Vieja pilot landscape), has marked the analysis activities carried out in the work package. In some cases it resulted in particularly profitable and promising moments of integration foreseen in the envisioning phases, as it happened in the Huerta de Valencia-Alboraya pilot landscape (with a very complex planning framework, which comprises the Huerta Law, Huerta Regional Plan, Agricultural Activities Plan and also the two Local Sustainable Energy and Climate Action Plans - SECAPs), where a path for the implementation of the LACAP outlines has been set.

It is clear that everywhere the AELCLIC project has correctly fulfilled its pathfinder objective by acting as a trigger for a work that all pilot landscapes intend to undertake concretely in the future.

## Work Package 5 | South Eastern Europe

The programmatic documents or inputs of the LACAPs included in the Work Package 5, South Eastern Europe, show a very articulated situation and different typologies of planning documents responding to the different needs and specificity of each pilot landscape. The variety of results reflects the differences that characterize each local network and each pilot landscape within the Work Package. Accordingly, each local network has been able to develop and agree on the key contents for their future LACAP, always identifying the main scopes and themes, the goals, the expected impacts, the opportunities, the solutions/actions and the main current obstacles. Therefore, the format of the AELCLIC pathfinder process has been changed to adapt to the specificity of each case according to the relationship of circular implementation set between the leading and the multiplier landscapes, and always following the same landscape-centred approach. In general, this work package has offered very different and stimulating case studies and conditions for the experimentation of the AELCLIC approach and for the codification of a procedural model.

The programmatic document for the leading pilot landscape of the Urban Fringe of Bologna, contains precise indications regarding both the key contents that the LACAP will have to deal with, and the form that it should have in terms of typology, articulation and hierarchy of its parts (see the final diagram shown in fig. 6), to ensure the integration and complementarity with respect to the Climate change governance tools already in force in the city of Bologna.

It is the result of a progressive refinement, in which the search for integration with national and local policies and plans for adaptation to climate change (PNACC, 2017 and BlueAp Plan, 2015), as well as the link to EU directives, have constituted important inputs both in the analysis and in the envisioning and design phases, ensuring a full consistency. Moreover, the results of the AELCLIC project have allowed to outline the structure and preliminary contents of a future detailed plan for the pilot landscape, capable of covering its main specific challenges in an integrated and systemic way, and in a cross-sector and cross-actor public-private alliance perspective. These characteristics of the programmatic document will allow to further develop, detail and specify the existing climate adaptation policies and strategies of the city, as well as to fine-tune and experiment climate adaptation solutions tailored for the specific region.

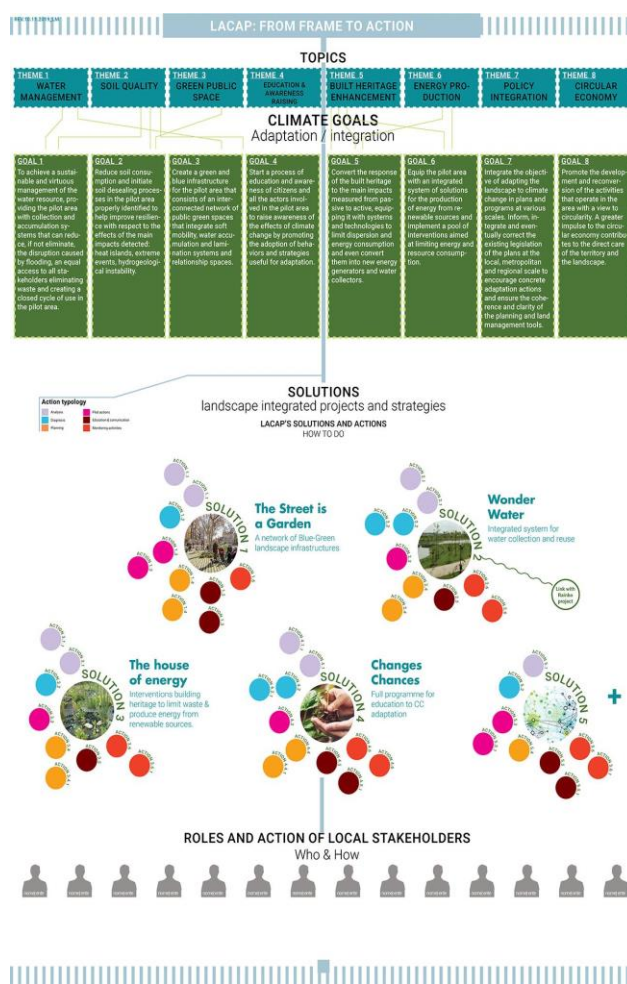
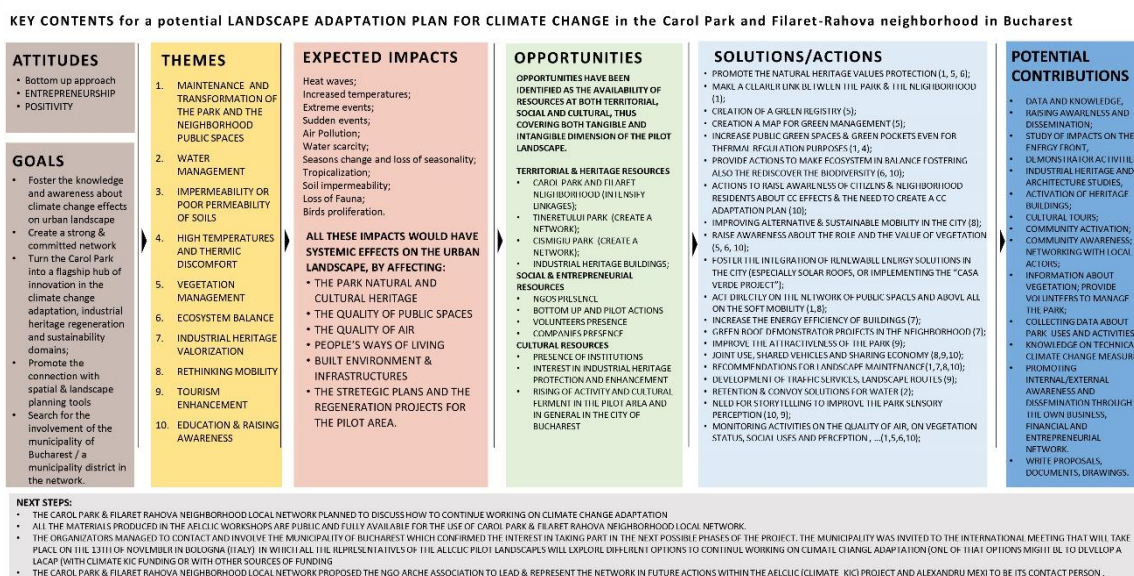


Fig. 7 | Scheme of the planning document for the LACAP in Bologna leading landscape.

Given the direct involvement of the municipality of Bologna as a partner of the AELCLIC project, the legitimacy of the ideas produced by the local network is ensured even though it will have to find a correct formalization in the future drafting phase of the LACAP. The same approach and criteria, in different ways,

have characterized the drafting of the LACAP's planning document in the Mantua pilot case, a context that also presents a high advancement with respect to the topic of adaptation to climate change (ref. to the recently adopted guidelines: *Resilient Mantova: Guidelines for climate adaptation, 2018*) and the leading role of the Mantua municipality in the local network. Here the influence on climate change governance as well as the integration with the current policies and planning instruments and the legitimacy of the ideas produced under AELCLIC have emerged positively. Especially and regarding the implementability of a future LACAP, in Mantua an important field of action has been identified in the connection between the adaptation strategy set with the Resilient Mantova guidelines and implemented by the AELCLIC project, and the regional landscape policies, intensifying the synergy between the Municipality, the Region and the rest of the stakeholders belonging to the local network. In Bologna, instead, the commonly desired implementation was in the direction of a strategic/detailed plan and/or pilot projects, on the format defined by AELCLIC.

Different results were achieved in the other two multiplier pilot landscapes, where the programmatic documents or inputs include the precise identification of contents for a local LACAP according to the aforementioned articulation. However, the form and type of instrument that the final LACAP should have, its connection with other planning frameworks and its implementation plan would be the subject of future development, in parallel with a stronger involvement of the local/regional administrations. In the case of Bucharest as well as in that of the Etna landscapes, the action of AELCLIC had a strong bottom-up connotation (see the deliverable 1 for further information), succeeding in a full commitment of the local networks, that identified also their possible roles for the future development of a LACAP, and in influencing the local Climate Change Governance, here absent or less advanced than in other contexts.



**Fig. 8 |** Scheme resuming all the key contents of the planning document for the LACAP in Carol Park and Filaret-Rahova neighbourhood multiplier pilot landscape.

The AELCLIC project and its alignment with EU directives, produced already relevant information for local policies and planning, and raised the interest of municipal administrations (of Bucharest, Romania, and Giarre and Catania, Italy) to be part of the AELCLIC local networks and to take a pivotal and legitimizing role in the development of new ideas. It is ascertained that everywhere the AELCLIC project has correctly fulfilled its pathfinder objective by acting as a trigger for a work that all pilot landscapes intend to undertake more concretely in the future.



## Conclusions

From the gained experience and comparative analysis of all the programmatic documents or inputs for future LACAPs (landscape adaptation plans to climate change), some main findings have been deduced and distilled (see Deliverable 5, dedicated to the critical synthesis of all the main findings of the AELCLIC project). Some important considerations must be made regarding the nature of LACAPs, which, as was expected, benefited enormously from the AELCLIC process. The process has in fact allowed to test the approach in parallel and to verify the congruity of the contents and purposes, thus influencing the definition of the LACAPs themselves and their most appropriate and effective "form". As emerges from the discussion carried out above, the programmatic documents or inputs for future LACAPs produced in each pilot landscape within the AELCLIC project clearly present all the elements deemed crucial by the local networks for the creation of adequate plans to adapt landscapes to climate change. All the local networks have reached the definition of the fundamental contents (themes, objectives, solutions and actions), while further specifications and elements, useful for the future definition of the LACAP, have variously characterized some of the pilots, determining an interesting and profitable diversity and richness of results. The variety of contents of each of these planning documents reflects the biogeographic, cultural and socio-economic diversity of the 15 pilot landscapes and local networks, which are remarkably influenced by the factors illustrated in the introduction of this document. The mutual comparison of the ongoing experiences carried out by the partners during the meetings also allowed the exchange of knowledge, the sharing of strategies, the implementation of methods, and finally the sharing of a procedural model. The richness and variety expressed in the programmatic documents or inputs for LACAPs testifies to the flexibility and scalability of the approach, able to adapt to the specific needs of each context, while ensuring common and comparable results, which are also consistent with the objectives set at the beginning of the project.

In drawing a picture of the general validity of future LACAPs, we have been able to detect that in the various pilot landscapes, taking into account their previous situation in relation to sustainability and mitigation and adaptation policies to climate change (CC), as well as their landscape and socio-economic characteristics, and the magnitude of the ongoing or expected CC impacts, the LACAP can acquire changing and adaptive forms, also configuring itself as an innovative type of instrument. One of these forms is that of a thematic "layer" capable of informing and sometimes correcting/improving the current programs and planning tools that regulate territorial, sectoral and landscape transformations. The LACAP can also be configured as a tool capable of linking different documents, sectorial and strategic plans, or be an informative document, supporting territorial and sectorial planning, as well as a reference for public or private initiatives on adaptation and mitigation of climate change. Even more, the LACAP can be also configured as a master plan or a detailed plan, in some cases also with the identification of pilot and/or demonstrative actions.

It can therefore be described as a tool capable of optimally fitting the needs of individual cases or landscapes (regulatory framework, action plan,...), with no restrictions or imposed structures, but with the priority objective of assuming the most streamlined, effective, incisive and inclusive form possible, since time is a decisive factor in the challenge of adapting landscapes to climate change. Avoiding an emergency approach that in most cases causes a loss and obliteration of values and landscape heritage, the process codified by AELCLIC and materialized in the various outlines for LACAPs, provides a model of transcalar, inclusive and effective action.

### Implementation of the outlines of the LACAPs

The flexibility that characterizes the LACAP as a tool is therefore an essential quality to guarantee the implementation and real assimilation of the results or outcomes that the AELCLIC project has produced in each pilot landscape. As presented in previous chapters, in some pilot landscapes this step of connection and



transfer of results, has already been initiated. This is the case of Malmi pilot landscape, of Huerta de Valencia pilot landscape, of Holland lowland & peatland pilot landscape and of the urban fringe of Bologna Pilot landscape, just to cite a few. The implementation of the outcomes produced in the AELCLIC project is also closely connected to the networks' proactivity and cohesion. For this reason, the project has paid special attention to the creation, strengthening and transfer of knowledge and operational tools to local networks. Mixed and transdisciplinary analysis and design methodologies combined with group management and team building techniques were key ingredients of all the collective and participatory work conducted during the AELCLIC workshops in each pilot landscape. The two fundamental criteria that guided the formation of the networks were those of balance and diversity. Two essential aspects in order to guarantee a fair and faithful representation of the main actors that inhabit and manage the considered pilot landscapes. Starting from this point, an inclusive character defined the work of all the local networks and all members were encouraged to define and search in and out of the network the subjects and resources necessary for the future development of the LACAP. This process of empowerment stimulated the resourcefulness and autonomy of local networks, reaching in some cases very high levels of commitment that are already turning into concrete actions, just as it was possible to learn directly at the international meeting held in Bologna last November 13<sup>th</sup>, 2019. The cases of the pilot landscapes of the Tornio River valley, of the cities of Mantua, Bologna and Helsinki, of the Besòs River in the metropolitan area of Barcelona and of the Haute Tarentaise Valley and Alt Pirineu Natural Park are good examples. The empowerment, transparency, inclusivity, identity and recognition of the network are therefore deemed important factors to ensure the legitimacy of the results obtained so far.

The information produced in the AELCLIC workshops and furthermore in the whole AELCLIC project was an activator for the development of future LACAPs or for the incorporation of Climate Change inputs in other spatial or sectorial plans that, subsequently, will follow the official participation processes foreseen in the local or regional planning system. The AELCLIC project, with the application of its inclusive procedural model, has proved to be able to demonstrate the importance and usefulness of integrating participatory processes for the preparation of landscape adaptation plans, at least for three crucial reasons:

- **Consistency, transversality and local identification:** Through a process aimed at sharing and defining the themes, objectives, actions and solutions, a shared scenario of sustainable development is envisaged, a common vision in which all the actors feel themselves represented.
- **Legitimacy and implementability:** If the network of stakeholders is well balanced and representative of the landscape where it acts (see for this Deliverable 1), the legitimacy of the taken decisions increases and the timing of the implementation or bureaucratic approval of LACAPs shortens.
- **Open and democratic governance:** Multidirectional (both vertical and horizontal) decisions and actions are promoted and a broader engagement and control is ensured both in the implementation phase and in the management of the transformations and initiatives envisaged by the LACAP, since the actors directly involved are multiple and participate in an active dialogue around a common goal (Landscape adaptation to Climate Change).

While satisfactory results and positive signs were collected in terms of human and technical resources and availability and active involvement of local administrations, the major criticalities emerged from the financial feasibility point of view. A fact that emerged clearly in every pilot landscape concerns the uncertainties related mainly to the funding opportunities suitable to support the future development of a LACAP. Also for this reason, in various cases it was difficult to require the members of the local networks to sign a formal or symbolic agreement for further implementations, while a broader availability to sign letters of interest in further developing the project has been found.

## **Impact and influence in climate change governance**

As emerged from the discussion carried out within each Pilot Landscape, the programmatic documents or inputs outlining the contents of potential LACAPs as well as the entire experience of the AELCLIC process, have generally had a positive influence on the existing governance models, in some cases generating synergies already explicitly formalized, while in other cases facilitating promising relationships. One of the factors that most certainly influenced this specific result was the widespread presence of administrations (being them local, regional, metropolitan administrations) and authorities (park authorities or basin/River authorities) within the local networks (see deliverable 1). In most cases, in fact, administrations and authorities supported AELCLIC activities. Where this relationship has been weaker, the networks had to be activated through additional and time-consuming methods in order to achieve the expected results. In general, from the testimonies collected during the local workshops developed in each Pilot Landscape, and more clearly at the international meeting held in Bologna on November 13, 2019, AELCLIC and the results produced in it have been considered a precious reservoir of data, tools, visions and strategies able to inform current governance models and flow into local planning.

## **Consistency with EU directives and regional, local plans for climate change adaptation**

As it can be verified from the critical analysis presented in the previous chapter and from the consultation of the documents included in the appendix to this document, in each pilot landscape an alignment and consistency with the European directives was sought from the initial analysis phases. Moreover, one of the main goals in the AELCLIC project was to contribute in achieving the sustainability goals set at the community level. The analysis of the ongoing planning at different scales (European, National, Regional and Local) was a fundamental moment of investigation that informed the AELCLIC project from its first steps, together with the community objectives, appropriately linked to the fundamental principles of the European Landscape Convention.

In each pilot landscape the existing directives or plans have been carefully studied in order to understand their potential connections to a future LACAP and to facilitate their synergic implementations (as an example, see some of the integration schemes of the planning tools with the LACAPs present in the WP2-Northern Europe reports). Where those directives or plans are already in force, and even better where they are ongoing, one of the greatest merits and potentials of the AELCLIC project and of the results contained in the outlines of the LACAPs lies precisely in their integration with the landscape dimension as it has been defined by the European Landscape Convention. This means on the one hand the integration of territorial policies from a systemic point of view, and on the other hand the implementation of the convention itself in order to reach a deserved effectiveness, almost 20 years after its signature.

However, in those pilot landscapes lacking local or regional adaptation plans to climate change, the work conducted by AELCLIC has been considered of great importance and inspiration. It stimulated interest in developing plans including adaptation strategies focused on the landscape. Overall, the integration of the landscape approach in the definition of Adaptation Plans to Climate Change can guarantee the simultaneous achievement of a broad range of objectives, which amongst others, and in addition to the environmental ones, include sustainable economic development, the promotion of circular economy models, the protection and promotion of landscape and cultural heritage and values, the advancement in social inclusion, participation and innovation as well as an improvement in civic and environmental education. In summary, the analysis of the AELCLIC outcomes proves the potential of the landscape concept to strengthen the EU identity by approaching Climate Change Adaptation as an opportunity to advance in our diversity, to bridge past and future and to promote new models of governance based in deep democracy and the combination of local and global values.



# **Appendix**



# **WP2**

Northern Europe



# **WP3**

**Atlantic Alpine Europe**





# **WP4**

South Western Europe



# WP5

South Eastern Europe



<https://aelcllicpathfinder.com/>