

LANDSCAPE, PEOPLE AND CLIMATE CHANGE

Guidelines for the constitution of Local Networks for Landscape Adaptation To Climate Change



AELCLIC PATHFINDER PROJECT | ADAPTATION OF EUROPEAN LANDSCAPES TO CLIMATE CHANGE



AELCLIC PATHFINDER PROJECT | DELIVERABLE 6

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Acknowledgments

These Guidelines are the result of 29 workshops developed in 15 Pilot Landscapes all over Europe during 2019 [DEL01]. We wish to sincerely thank all our participants for their time and insights! These workshops would not have been so productive without the support of local authorities and active 3rd parties.

The Guidelines build upon the Deliverables 01 – 05 of the AELCLIC project [link] under co-authorship of Bas Pedroli and Agnès Patuano (Wageningen University, The Netherlands), Juanjo Galan (Aalto University, Finland), Francisco Galiana and Emilio Servera Martínez (Polytechnic University of Valencia, Spain), and Daniele Torreggiani and Ludovica Marinaro (University of Bologna, Italy). All photos are from the team members except the aerial pictures of the Pilot Landscapes that have been obtained from Bing Maps.

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Climate-KIC is supported by the
EIT, a body of the European Union





Challenges, background and achievements

“Landscape” means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors
The European Landscape Convention (2000)

Europe is an outstanding landscape collage that expresses our history, diversity and identity, which supports our economic development and which promotes our wellbeing. Those landscapes are our collective creation and can be described as the “result of the action and interaction of natural and/or human factors”.

However, we know that those landscapes – and the way in which we live or produce in them – are increasingly affected by climate change and that we need to work together to plan their adaptation, which in the end, is the adaptation of our own societies to a new environment.

In the AELCLIC Project, we understand that Climate-Change adaptation is site specific and requires the support of all the people and groups living, working and enjoying a particular landscape. Moreover, we understand that the “landscape” concept can provide us with an ideal platform to see the whole picture instead of its different parts.

That is the reason why the project aims at defining and testing models for the creation of local Networks with the social, economic, technical and administrative capacity to define their own Landscape Climate-Change Adaptation Plans (LACAPs).

The AELCLIC project has been implemented over a set of 15 representative landscapes distributed across Europe and including rural, urban and fringe areas. In all those pilot areas, local NGOs, business people, politicians, researchers and other citizens, have worked together to understand the impact that climate change will have in their landscapes and ways of living. Following this diagnosis, they have been invited to agree on the basic goals and agendas that should be addressed by future local or regional LACAPs as well as the resources and commitments needed for the drafting and implementation of those Plans.

In addition, the AELCLIC project has promoted the exchange of knowledge and experiences between its different pilot landscapes and now facilitates the dissemination of the results to other landscapes in Europe.

Juanjo Galan, Aalto University



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Photographs taken during the various workshops carried out in all the pilot landscapes of the AELCLIC_pathfinder project. 1| Image from the 3rd workshop in Hyyppä river valley (Finland); 2| Image from the 3rd workshop in Malmi district Helsinki (Finland); 3| Image from the 3rd workshop in Tornio River Valley; 4| Image from the 1st workshop in Huerta de Valencia-Alboraija (Spain); 5| Image from the 1st workshop in Bertra Dune System (Ireland); 6| Image from the workshop in Haute Tarentaise valley (France); 7| Image from the 1st workshop in Bologna (Italy); 8| Image from the 2nd workshop in La Mata-Torrevieja (Spain); 9| Image from the 1st workshop in the Metropolitan Area of Barcelona, Besos River (Spain); 10| Image from the workshop in Bucharest, Carol Park And Filaret Neighborhood (Romania); 11| Image from the 1st workshop in Mantova (Italy); 12| Image from the first workshop in Serres d'Ancosa (Spain); 13| Image from the workshop in Lowland peat and polder landscape (Netherlands); 14| Image from the 1st workshop in the National Park of Alt Pirineu (Spain); 15| Image from the workshop in Etna Landscapes, Giarre (Italy); 16| Image from the AELCLIC International meeting held in Bologna on November 13th 2019.

“Landscape adaptation to climate change should be fostered by co-creation, to enhance robust, biodiverse and attractive landscapes, resilient to environmental change”

“Only after an ad-hoc analysis, it is possible to define more precisely Climate Change specific solutions and actions”

“Landscape singularity and high biodiversity are amongs the main landscape values identified”

“Prioritise simple and everyday actions”



Climate-KIC



“The results of the AELCLIC project have been included already in the masterplan for the renovation of the District!”

“Major investments are the main barrier for climate change adaptation actions”

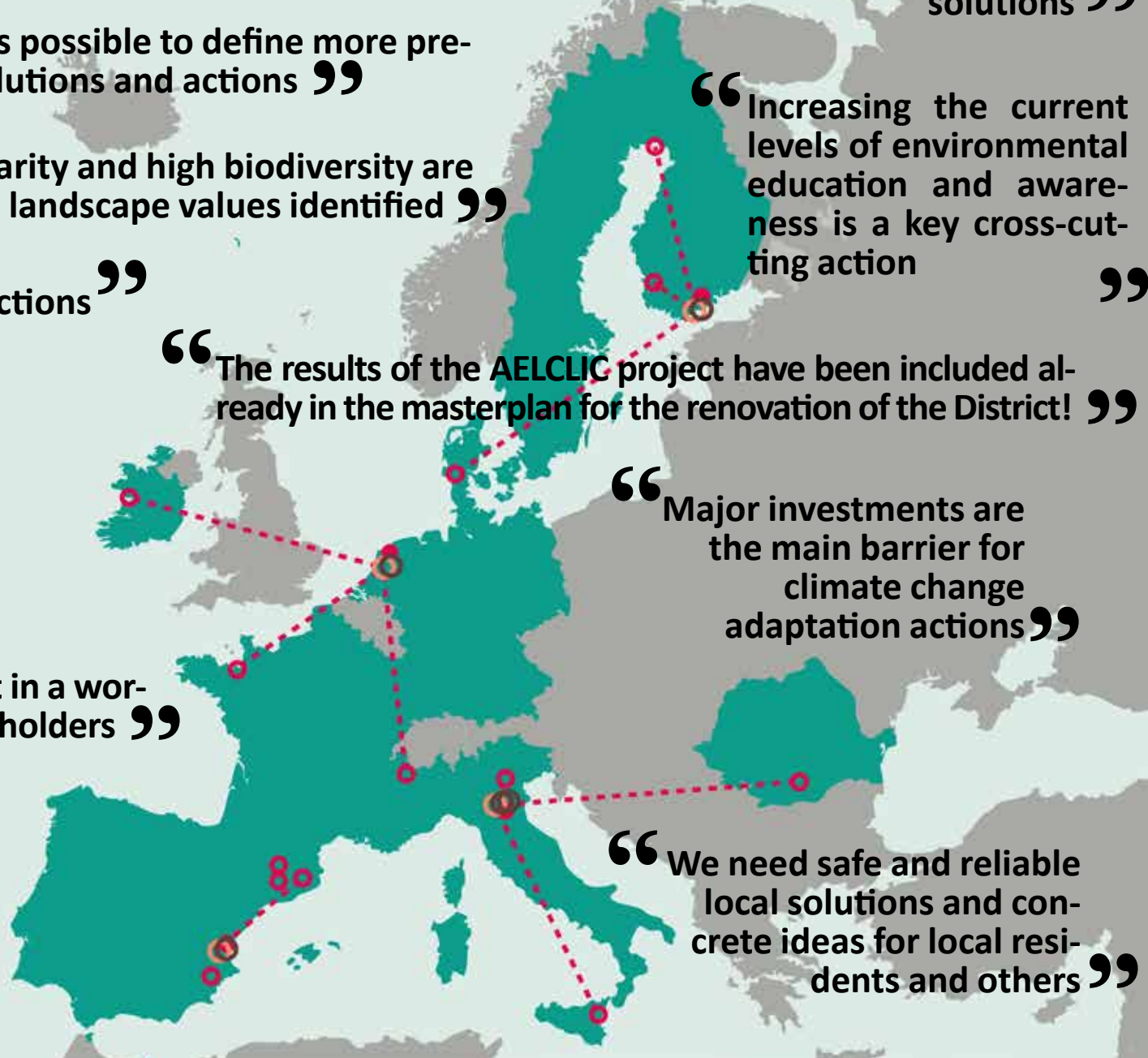
“Better one committed civil servant in a workshop than ten uninterested stakeholders”

“The excessive dependence on tourism and the lack of permanent population is a problem”

“We need safe and reliable local solutions and concrete ideas for local residents and others”

“Some climate change impacts enhance a transition to nature-based solutions”

“Increasing the current levels of environmental education and awareness is a key cross-cutting action”



Guidelines for the constitution of Local Networks for Landscape Adaptation to Climate Change

1 Create a flexible, representative and inclusive local network



- Foster a network capable of representing the landscape complexity, its societal diversity and guarantee vertical coordination with the different levels of territorial governance in the fields of landscape and climate change adaptation
- Check that the network has the legitimacy and the administrative, economic, societal, scientific and technical capacity to develop and implement plans and actions for Landscape Adaptation to Climate Change on behalf of the community
- To get a full overview of the issues and coordinate between top-down and bottom-up approaches to adaptation planning, both national, regional or local adaptation plans (promoted by public authorities) and landscape level plans (pushed by local or regional networks) should be combined. This can only be achieved by ensuring stakeholders engagement at all levels.
- Guarantee the involvement of local/regional administrations in charge of spatial planning and public authorities responsible of landscape protection.
- Often supra-regional actors, such as energy providers, transport companies or international travel agencies have dominant stakes in the area. It requires special effort to get them involved, but if climate adaptation and mitigation can be identified as their key interests (also for the sake of image), this can give unexpected opportunities for local action as well.

2 Build genuine trust & dialogue between stakeholders



- Stakeholder workshops are activities to enable learning-by-doing, increasing not just the available knowledge, but more importantly the two-way flow of knowledge between land managers and the local community. This helps building trust between stakeholders and fosters a more sustainable form of engagement
- Involve also critical stakeholders. It is often better to have them involved in a constructive way – even if very critically – than to disregard them.
- Create a common and shared language, co-defining the key concepts to be used, to provide cohesion and ensure mutual understanding among the stakeholders.
- Give to the local network the possibility to designate an official representative for future actions.
- Ensure a continuous participation of the network members throughout the process.

3 Co-define an engaging, transparent, flexible and proactive work plan and method



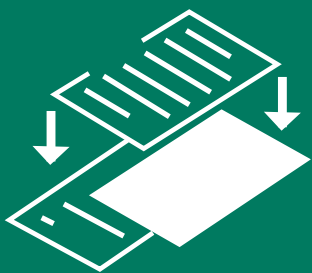
- Define a proactive process based on evidences, perceptions, needs and aspirations of the local community and conducive to the sustainable adaptation of the local landscape to climate change. For this purpose consider local and shared values and goals, co-identified and agreed climate change impacts and opportunities and co-defined strategies or inputs for a local Landscape Adaptation Plan to Climate Change
- Consider the available resources and the availability of the members of the local network in order to define a realistic and feasible work plan.
- Assess, share and discuss the available information from European, national, regional or local sources and consider the feasibility of generating new qualitative or quantitative information.
- Promote the co-definition of goals, methods and proposals and ensure a democratic and transparent process for decision making
- Keep flexible the set-up of workshops and activities in order to adapt to unforeseen circumstances and to new ideas emerging during the whole process.
- Facilitate the continuous and intense involvement of the stakeholders by defining an agile, well documented, consistently reported and inclusive process.
- Ensure the adequate and effective communication and dissemination of the intermediate and final results in order to retrofit the process and increase social engagement and impact.
- Supplement the LACAP with an Implementation Plan and a Monitoring Plan
- In the evaluation of different adaptation options, make use of multi-criteria analysis and stakeholder inputs
- Develop customized climate change impacts visualizations

4 Base the adaptation on the characteristics of the local landscape



- Provide good maps and descriptions of the biophysical, socio- cultural and economic characteristics of the local landscape.
- Identify the specific vulnerabilities of the local landscape to climate change impacts and define priority issues.
- Identify the local social traditions and customs in their relationship to readiness or reluctance to embark on new development pathways.
- Recognise the local landscape as an integrative and systemic platform combining social, economic, cultural, historical and biophysical dimensions

5 Align the lacap with other related plans and projects on climate change and local sustainability and resilience



- To ensure the relevance of the Landscape Adaptation Plans to climate Change (LACAPs), they should be adequately aligned, based on or included in existing or future adaptation plans or projects defined by the community or regional institutions.
- Ensure that the LACAP relates in clear way to the EU and national Adaptation Strategies.
- Prefigure clear and shared pathways of integration of the LACAP with existing policies and planning tools and plans that are being developed to achieve enforceable results.
- Develop joint initiatives with other projects that share similar aims; this not only enhances the representativeness of the local network but also strengthens the expertise available.
- Develop potential synergies and links between Climate Change Adaptation, Climate Change Mitigation and Sustainable Development and Local Sustainability and Resilience

6 Share, combine and generate knowledge



- If possible, use available open data sources in order to produce and present regionalized climate change scenarios for the local or regional landscape. This will increase stakeholder engagement and lead to better results in subsequent activities.
- Detect adaptation knowledge gaps and define strategies to fill them
- Information materials should be adapted to the local community's needs and to the profiles of the stakeholders.
- Make reference to the National Adaptation Strategies that all European countries should in the meantime have.
- Make use the available data, research and monitoring schemes provided by the IPCC, EU, national, regional and local institutions and universities focussing on climate change impacts and solutions.
- Promote the exchange of ideas and experiences with other national or European landscapes and the conformation of national and European alliances.

7 Think present, past and future



- Address the issue of adaptation to climate change in a strongly planning-oriented approach, effectively proposing the application of the principles of the European Landscape Convention on the subject of “protection”, “management” and “planning” of the landscape (ELC, 2000, art. 1 d, e, f).
- Promote the development of a collective landscape vision for the medium-term future (~2050)
- Define a multi-scale, collaborative/deliberative, and diachronic process.

8 Promote local solutions and local circularity



- The challenge of Climate change adaptation is highly landscape or site specific. A strong contribution from the local network is really important to foster a critical awareness and a real commitment to adequate adaptation.
- Undertake a solid climate risk/vulnerability assessment for priority sectors to support local adaptation decision making and tailored local solutions.
- Consider local landscape values, work with holistic themes or topics; address expected and perceived climate change impacts and opportunities, solutions, actions and barriers.
- Refer to a combination of soft, green and grey actions accommodating climate change adaptation.
- Go beyond the optimisation of specific outcomes and targets and look at the whole picture, referring to landscape-based solutions, including systemic actions on several themes and sectors.
- Reinforce the systemic dimension of the LACAP by promoting local circularity and a more circular metabolism in resources such as water, energy, food, wood or other strategic local resources
- Arrange for environmentally friendly transport options.
- Identify the use of imports or exports of food and fodder that can be avoided, promoting community supported agriculture (CSA).
- Stimulate local energy production using renewable sources such as biomass, waste, solar energy, etc., in order to prevent long-distance energy transport.

9

Promote systemic solutions and identify synergic win-win situations



- Adopt a systemic perspective to interpret the relationships between environmental, cultural, economic and social factors. Use the same systemic approach to define solutions.
- Create the network and define the workplan in order to cover the main challenges in an integrated way, and in a public-private alliance perspective.
- Develop climate adaptation policies and strategies, and fine-tune and experiment climate adaptation solutions tailored for the specific region, facilitating and unlocking cross-sector and cross-actor synergies, developing systemic actions, and identifying and solving potential conflicts. Consider the aggregated and systemic effect of specific actions or solutions and the down scalability of public policies and strategies.

10

Identify sources of funding and opportunities for public/private collaboration and investment



- Lack of funding is often identified as one of the main obstacles for implementing climate adaptation. Identify options to alleviate administrative restrictions on innovative solutions for climate adaptation.
- Be aware of potential market failures when leaving part of the implementation of LACAPS to commercial parties.
- Identify potential sources of funding local climate adaptation initiatives at both local and national/international level.
- Establish new contacts among landscapes with shared climate change impacts, opportunities and barriers.
- Create a strong, multi-national partnership as an indispensable prerequisite to create any grant application

OVERVIEW OF THE GUIDELINES

GUIDELINES



1 CREATE A FLEXIBLE, REPRESENTATIVE AND INCLUSIVE LOCAL NETWORK



2 BUILD GENUINE TRUST AND DIALOGUE BETWEEN STAKEHOLDERS



3 CO-DEFINE AN ENGAGING, TRANSPARENT, FLEXIBLE & PROACTIVE WORK PLAN & METHOD



4 BASE THE ADAPTATION ON THE CHARACTERISTICS OF THE LOCAL LANDSCAPE



5 ALIGN THE LACAP WITH OTHER RELATED PLANS & PROJECTS ON CLIMATE CHANGE & LOCAL SUSTAINABILITY & RESILIENCE



6 SHARE, COMBINE AND GENERATE KNOWLEDGE



7 THINK PRESENT, PAST AND FUTURE



8 PROMOTE LOCAL SOLUTIONS AND LOCAL CIRCULARITY



9 PROMOTE SYSTEMIC SOLUTIONS AND IDENTIFY SYNERGIC WIN-WIN SITUATIONS



10 IDENTIFY SOURCES OF FUNDING AND OPPORTUNITIES FOR PUBLIC/PRIVATE COLLABORATION & INVESTMENT

TOOLS AND METHODS

Identify and engage the key governmental, economic, social and academic actors involved in the management and use of the studied landscape in order to maximize the representability, legitimacy and operational capacity of the local networks.

Generate a safe atmosphere in which everybody is heard and all the ideas are considered discussed and publicly communicated;
Agree and define a shared vocabulary in order to support effective discussions and avoid misunderstandings;
Emphasize the benefits of consensus and win win solutions;
Acknowledge publicly all participants and increase the societal impact of the process by working on communication and dissemination.

Codify with local network the scope, goals, expected outcomes, schedule & working methods for the planned works;
Facilitate the dialogue by engaging in frequent “learning by doing” contact;
Design a transparent, highly visible, flexible, well documented and rigorously reported process
Support forward looking and integrative proposals;
Define a continuous and engaging process and narrative with an adequate articulation of ideas, a holistic and systemic approach and a clear connection between phases and activities (a real process rather than a set of disconnected events).

Taylor the process to the characteristics of the local landscape and local community.
Gather, share and generate the required information to develop a solid analysis, diagnosis, prognosis of the local landscape and to define feasible and socially supported strategies and actions

Combine top down and bottom up approaches to climate change adaptation & mitigation and sustainable development.
Coordinate and generate synergies with national, regional or local adaptation plans (promoted by public authorities) and landscape level plans (pushed by local or regional authorities or networks)
Relate LACAPs to regional and national Adaptation Strategies

Promote the exchange of knowledge at a national, regional and international level and foster alliances;
Use the landscape as an integrative platform for different types of knowledge and for the definition of systemic and holistic solutions;
Take advantage of existing information and knowledge and assess realistically the capacity of the network to generate quantitative and scientific information;
Define a clear plan for communication and dissemination in order to increase social impact, people's awareness and public engagement.

Develop a forward looking strategies that go beyond the duration of the process to create a LACAP
Generate different scenarios and future visions by combining global and local drivers of change and the expectations and needs of the local stakeholders;
Produce regionalised climate change scenarios; make use of available research and monitoring schemes.

Quantify specific outcomes and targets of local solutions, referring to a landscape based approach;
Explore the connections between Climate Change Adaptation & Mitigation, Sustainable Development and Circular Economies/Metabolisms. Assess the dependence on imports and exports on natural resources, energy, goods, etc.

Adopt a systemic perspective to allow for inclusion of all relevant institutional interests and connections between sectors and scales
Explore with all the stakeholders their common goals and how they can be achieved jointly
Show and discuss with the local network the importance and potential of strategic, holistic and systemic thinking

Assess the economic interest of funding agents to gain from involvement in climate adaptation planning
Generate regional, national and international alliances for fund raising and for the exchange of knowledge and experiences.

CONSTRAINTS

Some crucial stakeholders and actors might feel disconnected, sceptical or distrustful about systemic and holistic discussions.

Personnel with experience in facilitation and engagement techniques might be needed to guide the process;
The management of the whole process can be quite time consuming (organization of activities, reporting, dissemination etc);
Existing preconceptions, prejudices and different understanding of the same concepts might hinder an effective and constructive dialogue.

Risk of end up generating disconnected activities, ideas, proposals and results;
Progressive loss of interest of participants if they feel that there is no clear advance or the results are not tangible enough;
Usual tendency to concentrate in partial problems and in restricted approaches to the landscape;
Usual focus on analytical issues with a frequent weak development of proposals

Data availability may be scattered over various organisations and data accessibility may be deficient;
The analysis and proposals might end up concentrating in very specific aspects or in disconnected (non systemic) actions. A balanced composition of the local network can mitigate this risk;

The regional and national Adaptation Strategies are often formulated in very general terms, without adequate financial support;
Often, national regulations are more rigorous than regional and local ones;
This could hinder the flexibility required for identifying integrative local climate adaptation solutions.

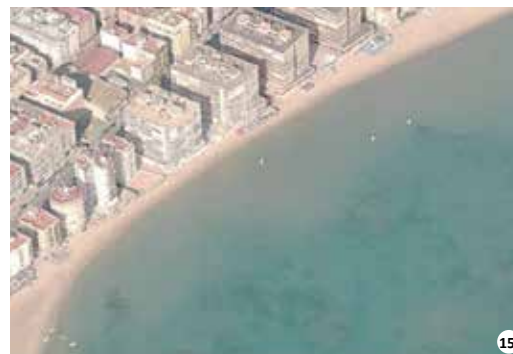
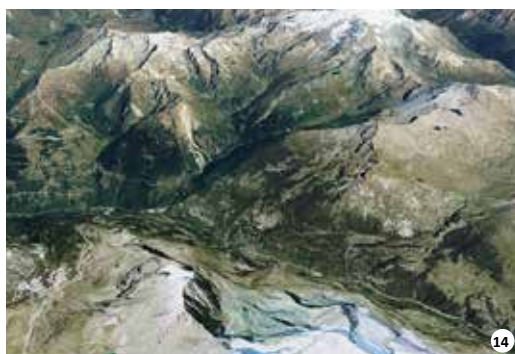
The generation of quantitative and rigorous information and knowledge is usually time consuming and expensive;
Lack of local information (e.g. climate change impacts)

Political interests often don't reach beyond the standard 4 or 5 years' terms of elected officials;
Regional climate scenarios have often wide ranges of uncertainty;
Tendency to focus on the analytical part of the process.

Proper easy to use tools are often not available for local landscape based solutions
Market parties may not be interested in local circularity because of potential profit losses

A systemic perspective is not always easily accepted by sectoral stakeholders
Strategic, systemic and holistic approaches can disappoint members of the local network looking for particular and tangible solutions

Gains are often long term whereas the market requires short term benefits



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AELCLIC PILOT LANDSCAPES. This mosaics displays the wide variety of landscapes in which the AELCLIC project was implemented.
 1| Mantova (IT); 2| Malmi district Helsinki (FI); 3| Hyypää river valley (FI); 4| Tornio River Valley (FI); 5| National Park of Alt Pirineu (ES); 6| Lowland peat and polder landscapes (NL); 7| Besòs River, Barcelona (ES); 8| Bologna urban fringe (IT); 9| Serres d'Ancosa (ES); 10| Carol Park And filaret Neighborhood (RO); 11| Etna Landscapes, Giarre (IT); 12| Huerta de Valencia Alboria (ES); 13| Bertra Dune System (IR); 14| Haute Tarentaise valley (FR); 15| La Mata-Torrevieja (ES);

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on the side page.
 Table resuming a general overview of **TOOLS**, **METHODS** and **CONSTRAINTS** for the application of the **GUIDELINES**.



AELCLIC Deliverable 6

Guidelines for the constitution of local networks for landscape adaptation to climate change

December 2019

Contacts

For further information and contacts please check our website

<https://aelclicipathfinder.com/>

Further links

Climate-KIC | <https://www.climate-kic.org/>

EIT | <https://eit.europa.eu/>

EU Climate Action | <https://ec.europa.eu/clima/policies/adaptation/>

EEA Climate Adaptation Platform | <https://climate-adapt.eea.europa.eu/>



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The logo consists of a white circle with the word "AELCLIC" in white, bold, sans-serif capital letters centered inside it. This circle is positioned in the middle of a horizontal band of vertical white lines of varying widths, which spans the width of the image.

AELCLIC

www.aelcllicpathfinder.com