



# MASTER ADAPT

MAInSTreaming Experiences  
at Regional and local level  
for ADAPTation to climate change

**Detailed Policy Guidance for setting adaptation objectives  
and planning for adaptation at regional and sub-regional  
level in connection with Lombardy Region**

**Action C.1 – Extended Abstract**

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for ADAPTation to climate change - LIFE15 CCA/IT/000061

## RESPONSIBLE FOR THE ACTION AND THE DELIVERABLE

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The application of the methodology, as defined in the scope of LIFE project Master Adapt on the different case studies on the Italian territory, and reported in Chapter 2, "*Setting of strategic objectives for the territory*" is described in the present document by the respective representatives:

- G. Satta (Regione Autonoma Sardegna) for the case study Regione Autonoma Sardegna;
- S. Marras and V. Bacciu (Università di Sassari) for the metropolitan areas of Cagliari e Sassari;
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- T. Freixo Santos (Ambiente Italia) for the case study "North Salento" (Apulia).

Chapter 3: "Funding schemes available for supporting climata adaptation at the local and regional level" edited by Luca Cetara (Fondazione Lombardia per l'Ambiente).

Chapter 4 "An overview on adaptation action at the European level" edited by Teresa Freixo Santos (Ambiente Italia)

## Extended Abstract

The Policy Guidance for the setting of adaptation objectives at the local and regional level here presented are linked to the Guidelines for the analysis of climate impacts on the territory, which were produced within the same project LIFE Master Adapt and presented in the document "*Guidelines, principles and standard procedures for climate analysis and vulnerability assessment at the local and regional level*" ("*Linee guida, principi e procedure standardizzate per l'analisi climatica e la valutazione della vulnerabilità a livello regionale e locale*").

The starting point for the development of adaptation strategies is, in fact, understanding what sort of impacts the new climate scenarios will bring on the territory and evaluating their consequences on the development of the area. Inside the project LIFE Master Adapt, such analysis was suggested to be taken through various passages, from the preliminary studies on climate and on the territory's conditions, up to the evaluation of its vulnerability and resilience elements or adaptive capacity. It is on the basis of such knowledge that the preliminary elements for the strategic approach are produced and the goals are therefore established, to obtain answers and efficient solutions for the territory.

Once knowledge about impacts and the territory's vulnerability towards ongoing and future climate change is achieved, it is recommendable to characterize the framework in which the decision-making processes for the setting of objectives will take place in. There are various sources of knowledge and information regarding the subject of climate adaptation to climate change which can support the start-up and the first phases of this process: in particular, tools from the European level, the national and regional Strategies and other specialized sources. In fact, much knowledge about adaptation has already been achieved on different levels: it is recommendable to value such information and tools, also in order to harmonize one's own actions with the global ones. Among the most reliable sources it is important to name the Climate-Adapt platform by the European Agency for the Environment, the European Strategy and the National Plan, as well as examples of Strategies on regional and local level, which are more and more frequent.

Moreover, it is essential to define the institutional context in which the objectives are to be developed: climate change has impact on many different sectors and therefore requires answers from a great number of actors. Coherence and sharing of purposes right from the initial phases mean wide and participative support throughout the process. Starting from a general level, there are at least three integration focuses to consider when developing strategic adaptation targets: climate change mitigation (with reference to the Paris Agreement), sustainable development (and the SDGs) and disaster risk reduction and management (with reference to the Sendai Framework).

Climate change introduces us to urgent, rather severe challenges: especially on the long term, the process can be defined by great uncertainty, about entity and evolution of the impacts, the availability of resources and the effectiveness of the responses. This makes the process of defining and implementing policies remarkably complex. One of the tools that can be retrieved from literature to help deal with this uncertainty is to adopt iterative decisional processes, as the one described by the British Department for Environment, Food and Rural Affairs (DEFRA, 2005). This model uses a cycle of steps to define flexible and shorter-term actions, which are regularly updated by progressively integrating new information about climate change impacts on local scale.

Previous studies on the subject suggest some important principles to define effective and coherent adaptation targets, as integration to the concept of iterative process. Briefly:

- **Consciousness:** it is necessary to have a wide overall view that considers the time horizon, similar experiences developed in other countries or contexts and different decision-making processes, which are able to integrate the uncertainty factor;
- **Efficacy:** the positive outcome of adaptation is defined by solid, up to date scientific bases, by wide sharing with the local stakeholders and by cooperation among the administration sectors which are responsible for the development of the targets;
- **Progressiveness:** incremental development of targets through regular review moments and constant update, always keeping knowledge about available good practices up to date as well.

The present Guidance Policies bring forth a method to deal with developing adaptation objectives. The process is split into four logic passages: comprehension of the goals or of the general adaptation aims, definition of an overall vision for the development of the territory in climate change conditions, identification of general and specific objectives and, finally, suggestions of possible actions (options) to achieve the set objectives.

Adaptation goals are general adaptation targets of a general level: in short, minimizing the risks coming from environmental impact and maximizing the opportunities that come from the new climate standards. This yet generic formulation can start to fit in the picture of the specific case of the region for which the objectives have been developed by means of the so-called Vision tool: a picture of the territory in a long horizon period, which can imagine it in a positive and integrated manner, oriented towards a development which is adequate to mutated climate conditions. The Vision is the starting framework towards defining adaptation objectives for the

territory and, at the same time, a tool which is useful towards guaranteeing coherence among the policy measures of the different sectors.

Further passages, which will be more and more specific towards every single case, are to be: identification of the thematic sectors for action, that can be partly or totally coincident with the areas administrating the sectorial policies of the local Government body; definition of Focus Areas, meaning the key element that specifies the impact of climate change on the previously defined sectors; formulation of specific adaptation objectives for the considered action areas and territory, which are need to be built as integrated with the current territorial policies. Finally, it will be possible to elaborate adaptation options: accurate solutions, that can theoretically contribute to gaining the defined Goals and that can be turned into Actions or Measures in the program of the local Government Authority or administration.

The document presents some practical cases, developed by the project LIFE Master Adapt as examples and clarifications about the theoretical formulation of the method.

A synthesis (chapter 3) of the main financial sources for adaptation to climate change is also offered, which are a necessary element towards the practical implementation of the theories we have here studied. To complete all information, the last part of the document (chapter 4) synthetically describes the landscape regarding the main adaptation initiatives at European level.

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