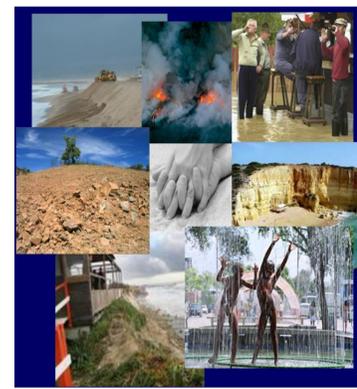


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1. Training Algarve municipalities on vulnerability and local adaptation to Climate Change

Mediterranean regions have high susceptibility to climate change. The increase of temperature, the increased incidence of forest fires, water shortage or the sea level rise are some of the main effects. Aware of the need to act at municipal level on the problematic of climate change, the Instituto Superior Técnico, framed by the programme Agir – Ambiente of the Calouste Gulbenkian Foundation, promoted three training actions addressed to Algarve municipalities. On those, was discussed climate change and consequent vulnerabilities, as well the need for adaptation activities located in more vulnerable areas.

The developed actions had the purpose of raise awareness to the need for local action in matters of climate change, bearing in mind the sustainability of tourist destinations.



In a specific way, the **objectives of the training activities** are:

- Debate the creation of new models for urban - tourist intervention adapted to climate change;
- Establish the perception of climate change not as a cost but as an opportunity;
- Recognize the need to adopt an action plan to climate change at municipal level.

Contents of the training:

Module I – The problematic of Climate Change (schemes, causes, concepts, scenarios);
Module II – The local and regional problematic (territorial impacts and economic activities);
Module III – Case study – Lessons from international practice.

Main indicators of the training activities:

- 10 of the 16 Algarve municipalities attended the activities;
- 40 participants (including representatives of CCDR-Algarve, Fortaleza de Sagres, Sapal de Castro Marim Natural Reserve, Vila Real de Santo António and Océânico Golfe);
- None of the participants have a senior position;
- 97% considered the training relevant and 100% useful for their jobs;
- 87% considered their personal objectives for the training achieved;
- 93% considered the training meet their expectations;
- 67% considered the training will have repercussions and practical effects in the territorial management of their municipality;
- Main priorities for the future, as identified by the participants:
 - Integration of climate change in the municipal instruments of territorial management;
 - Training / sensitization of decision-makers to climate change;
 - Renewable energies and energy efficiency;
- 20% referred the future need to train local decision-makers;
- Immediate effects: Loulé and Lagoa Municipality boost training activities in the field of climate change.

2. Local Action Plans to Climate Change (PLAAC)

• What are they?

Strategic plans, global and integrated, that recognize the role of local authorities in the formulation of policies and countermeasures to CC. Are centralized in the role of decision-makers and remaining stakeholders, identifying priority areas for action and setting mitigation and adaptation measures of short-, medium- and long-term. Provide an integrative framework of action and adaptation to CC with local concerns and municipal planning. This instrument was already presented to Algarve municipalities as a way of act at municipal level to tackle CC.

• Objectives:

- Reduce CO₂ emissions;
- Establish proper answers for CC adaptation;
- Sensitization of population to change their behaviors that lead to a less intensive use of natural resources;
- Illustrate the economic, social, environmental, and institutional benefits of implementing mitigation and adaptation measures to CC.

• Benefits:

- Contribute to national and European commitments of reduction of emissions;
- Aware local authorities to their role on action against CC effects;
- Local positive impacts: employment and economic development, financial savings, air quality and traffic reduction, enhancement of quality of life, among others.

Facts on Climate Change (CC):

- Are a reality;
- The impacts of anthropogenic CC in the XXI century are inevitable;
- Have high change to be aggravated;
- Will have positive and negative impacts on several natural, social and economic systems, varying from place to place;
- Have significant, and complex, cumulative effects;
- The harshness of the resulting impacts will depend of the adopted mitigation and adaptation measures;
- There are impacts that can be avoided / minimized / controlled by the mitigation measures;
- There are irreversible impacts to which we must adapt.

Examples of mitigation measures:

- Reduce the need for energy (e.g. travelling);
- Increase energy efficiency;
- Reduce the level of carbon in fossil fuels;
- Increase the % of energy supply from renewable energies;
- Increase the practices of soil use;
- Carbon sequestration by natural sinks;
- Reduce carbon loss, especially in organic soils;
- Alternative uses to HFC;
- Industry modernization;
- Promotion of sustainable construction;
- Promote the use of local goods.

Examples of adaptation and planning measures:

- Integrative approach to water resources management;
- Sensitization of population to climate change;
- Establishment of criteria and location zones for buildings and infrastructures;
- Creation of risks alert systems;
- Change the buildings and infrastructure design;
- Creation and promotion of new tourism products;
- Vulnerability analysis;
- Creation of resilient communities to disasters;
- Abandonment of risk areas;
- Protection infrastructures to erosion and sea water intrusion;
- Avoid the over-exploitation of resources;
- Conservation and expansion of natural areas.

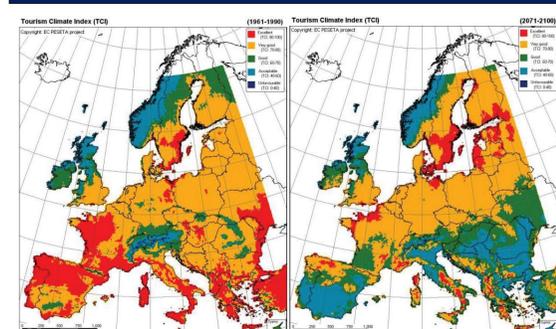


Figure 1 – Simulated conditions for tourism, in summer, 1961-1990 e 2071-2100. (Fonte: EEA (2007); Climate Change: the cost of inaction and the cost of adaptation; EEA; Copenhagen)