



ClimAdaPT.Local
Estratégias Municipais de Adaptação às Alterações Climáticas



SPREADING AND STRENGTHENING MUNICIPAL ADAPTATION: THE CASE OF **CLIMADAPT.LOCAL**

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UAS SPRING CAMPUS, BERLIN, APRIL 2018



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- ❖ **INTRODUCTION: Context and Framework**
- ❖ **ClimAdaPT.Local: the Project**
- ❖ **SOME RESULTS: Social Perceptions of Climate Change**
- ❖ **OUTCOMES OF THE PROJECT**



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INTRODUCTION

CONTEXT AND

FRAMEWORK



CLIMATE CHANGE IN SOUTHERN EUROPE

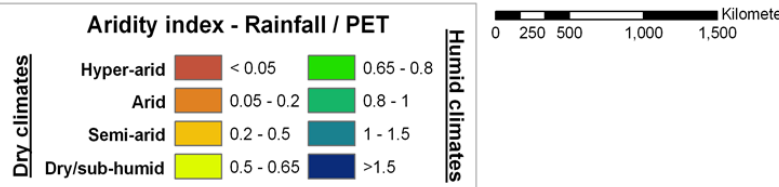
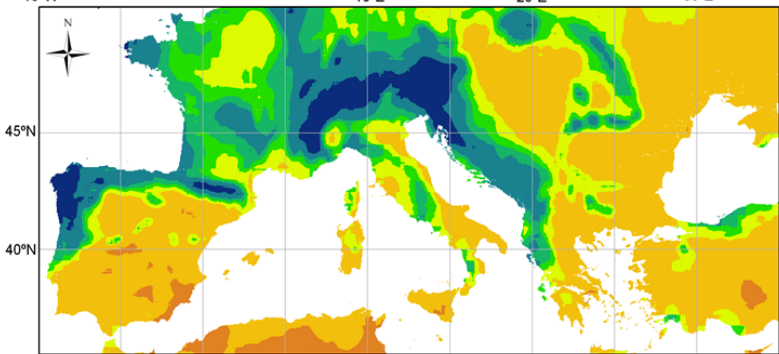
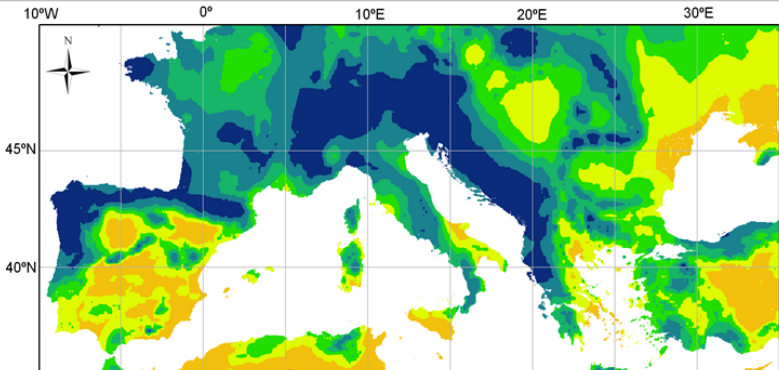
- **Climate change in Southern Europe:**
 - Lower rainfall
 - Higher temperature
 - Increased climatic aridity
- **Impacts on water resources:**
 - Decreased water availability
 - Increased frequency of droughts
- **High impact on coastal areas**
 - Sea Level Rise
 - Changes in Storm Surge and Precipitation
 - Coastal Water Temperature
 - Ocean Acidification

There are already strong reasons to adapt to the "current climate"

Local governments play a crucial role in adaptation

Current (1961-1990)

Future (2071-2100)



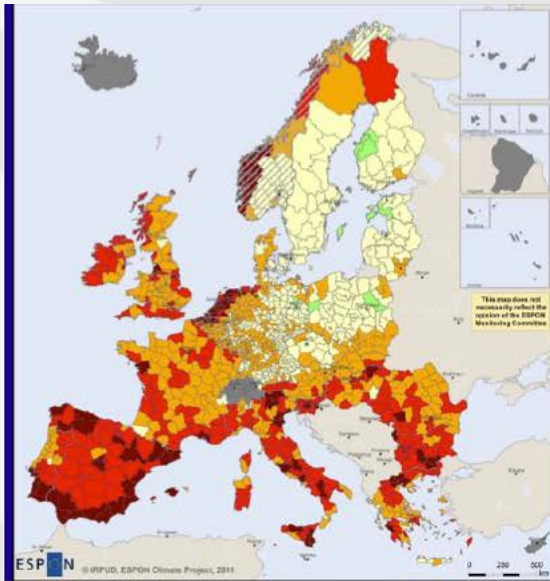
Climatic aridity in the Mediterranean region



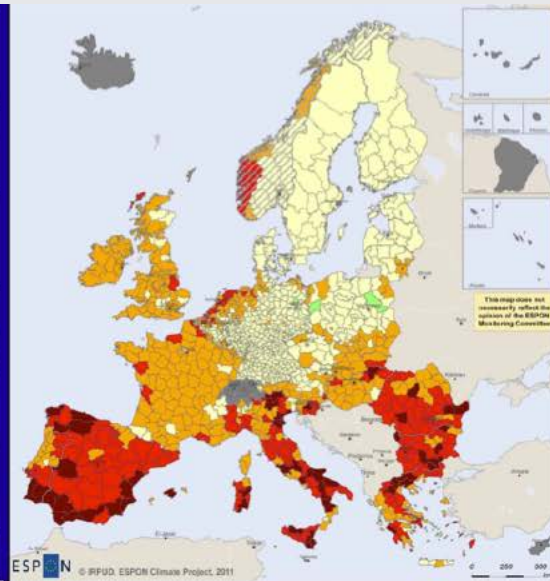
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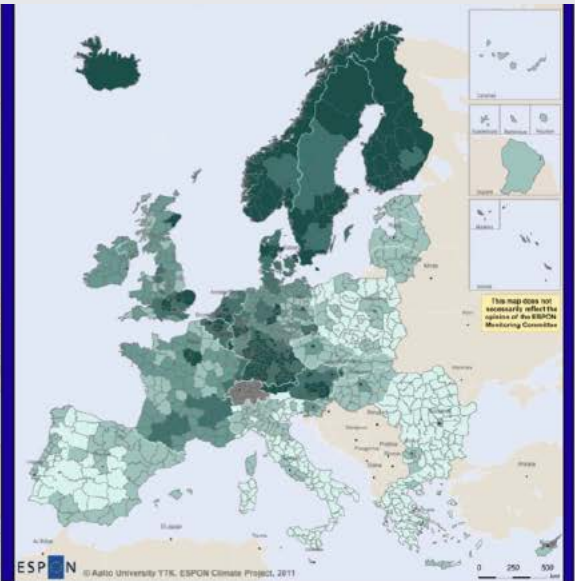
Climate Change Adaptation



Potential Impact



Potential Vulnerability



Adaptation Capacity

Source: Espon, 2011



Framework

Two main lines of adaptation research to Climate Change (Adger et al 2007, Tol 2010, Wise et al 2014)

- 1 – Instrumental approach** → quantification + consequences of CC
↳ adaptation toolkits
- 2 – Socio-political approach** → governance and politics of adaptation
↳ development and implementation of methods to engage communities in decision-making



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Framework – socio-political approach (Pelling 2011, Bennett et al 2015)

Governance + decision-making + stakeholder networks + politics of CC adaptation involves:

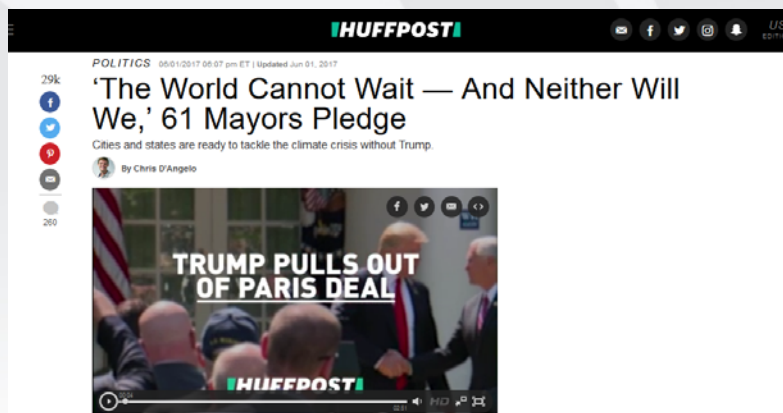
- a) Managing information from various sources
- b) Participation in democratic practices
- c) New processes of decision-making for adaptation
(e.g. at municipal level)

Why focus on the Local Level?

- Leadership of cities >> *Debate that appeared around 20 years ago, as a reaction to the absence of national public policies on climate change adaptation*
- Joint initiatives



- Today...



WASHINGTON — Responding to President Donald Trump's decision to withdraw the U.S. from the historic Paris Agreement on climate change, dozens of state and local officials have vowed to lead where the president refuses to.



Bloomberg: Climate adaptation doesn't need Trump 09:07

Story highlights

Editor's Note: Michael R. Bloomberg and Maroš Šefčović are co-chairs



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Why focus on the Local Level? Link to communities





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The role of municipalities in tackling climate change comes naturally, in the way that every facet of their activities, roles and responsibilities will have some level of impact on carbon emissions.

Therefore, their capacity to influence CC action and policy derives from:

- the **services** they deliver already;
- the **strategic roles** they play;
- the **regulatory influence** they have to enforce national standards and directives;
- the **relationship** (and therefore potential influence) they have with the citizenry, voluntary and business sector and/or other public bodies in their vicinity

(Roberts, 2012)



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CLIMADAPT.LOCAL THE PROJECT



ClimAdaPT.Local Project

ClimAdaPT.Local

is aligned with the main aims of the European Strategy for Adaptation to Climate Change (CC) Intending to demonstrate that adaptation at local level can be effectively implemented.

ClimAdaPT.Local

- ✓ Provides training for municipal technicians,
- ✓ Is based on a dialog with relevant stakeholders,
- ✓ Will create a network of local CC adaptation

26 Local Stakeholders' Engagement Workshops

- 1400 participants
- 21% of the Portuguese population inhabits within these 26 municipalities



ClimAdaPT.Local Project: main goals



- Preparation of **Municipal Adaptation Strategies to Climate Change (EMAAC)**
- **Capacity building on Adaptation to Climate Change** of the municipal technicians from the 26 municipalities involved
- **Trial of an engagement model** (municipalities/researchers/citizens)
- **Co-creation of knowledge**



municipal technicians
local stakeholders



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Research approach (UKCIP, 2009)

Present and future vulnerability scenarios (per each municipality)

Priority assessment taking the CC scenarios into account

Develop a set of adaptation workshops

Articulation with local decision-makers, technical staff and local communities

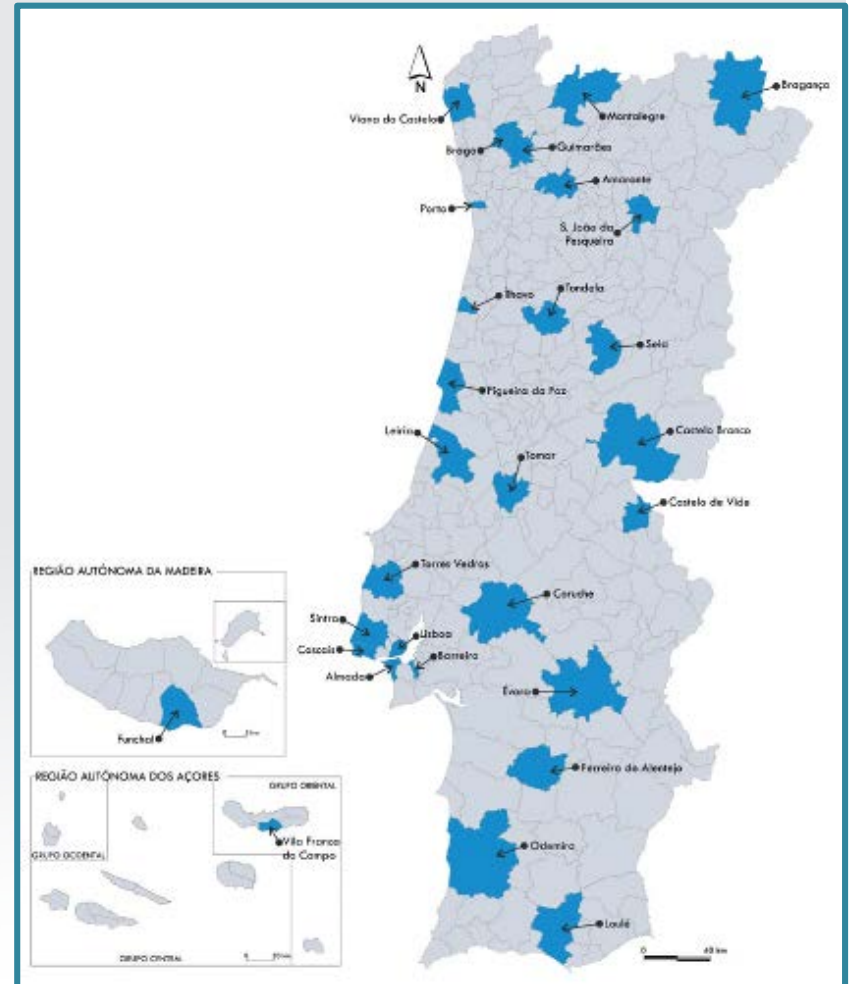
Engagement of the wider community in CC adaptation



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Methodological framework: context





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Stakeholder Engagement Workshops



26
Local
Workshops

Methodology (sociological approach):

- Collaborative Mapping + Selection of key stakeholders:
 - Identification by **local authorities** (municipal technicians)
 - Identification through the advice of **scientists and local experts**
 - **Fieldwork and 'snowball' method**

Objectives:

To **involve** the local communities;

To create a **monitoring committee** for the future.



Stakeholder Engagement Workshops

Identifying, mobilising and bridging a wide and diverse range of stakeholders:



- National, regional and local administration entities/policy makers
- Main economic actors/ local businesses
- Socio-professional organizations
- Schools, research centers
- Local civic associations and social welfare organizations (IPSS)
- Fire brigades/Civil protection
- Key local leaders (formal/informal)
- Media
- Etc.

Positive aspects found so far:

- 1 – Strong **political commitment**/will in the Municipalities
- 2 – Strong **participation and engagement** of Stakeholders



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Stakeholder Engagement Workshops



Main goals:

Cross-sectoral/transdisciplinary engagement of *stakeholders* contributes to:

- **Increase levels of knowledge** on local adaptation
- **Identify and clarify priorities**
- Promote **transparency in decision-making**
- **Empower stakeholders** to influence adaptation and decision-making processes
- Facilitate **consensus building** / create **synergies** and ensure a good **coordination of responses**
- **Encourage sharing of adaptation responsibilities** between social actors
- Improve the **fairness, social justice and legitimacy** of adaptation decisions and actions



Local
Workshops

(Grothmann, 2014)

Stakeholder Engagement Workshops

Discussion guidelines:

- **Perceptions on Climate Change Impacts**
 - **Opinions/Evaluation about current Local Adaptation Options**
(general and specific subjects/sectors)
 - **Future Visions/Strategic Goals for the Municipality**
- +
- Survey for stakeholders



Some results in the next slides





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SOME RESULTS

SOCIAL PERCEPTIONS

OF CLIMATE CHANGE



RESULTS: Social Perceptions of Climate Change

1. Is Climate Change **being felt/perceived already?**

ANSWER:

Overall YES



Consistent remission to recent perception of changes (Reyes-Garcia, 2016)

*“We are in January and we haven’t felt actual cold weather yet”
(Bragança, north)*

*“This is like Africa, on the same day we have rainstorm and then sun”
(Castelo de Vide, south)*



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RESULTS: Social Perceptions of Climate Change

1. Is Climate Change being felt/perceived already?

Professional activities have a crucial influence on perceptions of Climate Change (farmers and fishermen)

“I noticed, this year, that my orange tree flowered twice, it must have been confused”
(Farmer, Ílhavo, centre)

“The olive harvest started earlier, outside the usual period, at a time in which the mills weren’t opened yet to receive them”
(Farmer, Castelo de Vide, south)

“We had tuna again in the Algarve, and the sardines are fatter and smaller”
(Fisherman, Loulé, south)



RESULTS: Social Perceptions of Climate Change

QUESTION

2. How is Climate Change being perceived?

ANSWER:

➤ **Climate memory** (Hulme, 2008)



People tend to recall other moments of their biography in order to systematically place the changes felt in the present time

“The clothes I used to wear as a child had nothing to do with the clothes people wear nowadays; we used to wear thick clothing and now I feel that the temperature is much more mild”

(Ílhavo, centre)

➤ **Fading out of the seasons & disappearance of the intermediate seasons**

“Before, the seasons were more bounded and reliable in terms of temperature”

(Montalegre, north)

RESULTS: Social Perceptions of Climate Change

QUESTION

3. Is CC being perceived as a **threat or an opportunity**? (Lorenzoni, 2007)

ANSWER:

- Essentially as an opportunity
 - ➔ Survey answers show a dominant perception of CC as an opportunity, reflecting the “un-dramatic” effect of the Workshop

CC as an opportunity for local development

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%



Dark blue colour= totally disagree
Orange colour= totally agree

Source: Guerra *et al.*, 2017.



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RESULTS: Social Perceptions of Climate Change

CC as a threat

- ❖ Losses in agricultural production
- ❖ Coastal erosion and landslides
- ❖ Forest fires (no/unattending land owners)

CC as an opportunity - willingness to action

Actors that showed a greater willingness to action:

- Farmers
- Large companies
- Transition movements
- Teachers
- + Firefighters,
Civil Defence
National Republican Guard (GNR)



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OUTCOMES OF THE PROJECT

OUTCOMES OF THE PROJECT

26 Municipal Adaptation Strategies, with specific measures to be adopted in each sector, over the short, medium and long term

- Introduced and reinforced the local **participatory culture**
- **Enhanced communication capacity** between different audiences
- Helped **decode the complexities** of climate change language and knowledge
- **Strengthened the confidence** of the local administration and institutions
- Fostered and advanced the **co-production of knowledge**

OUTCOMES OF THE PROJECT (cont.)

- Undertook a **Holistic interdisciplinary** exercise
- Paved the way for a **continuous and expanding process** of adaptation
- Established a **political and institutional commitment** among local decision-makers to create a post-Project local adaptation strategy, assisted by a Monitoring Committee in each of the 26 municipalities
- Articulation of the municipal strategies with **neighbour municipalities**



Creation of a **Municipal Network for Climate Change Adaptation**

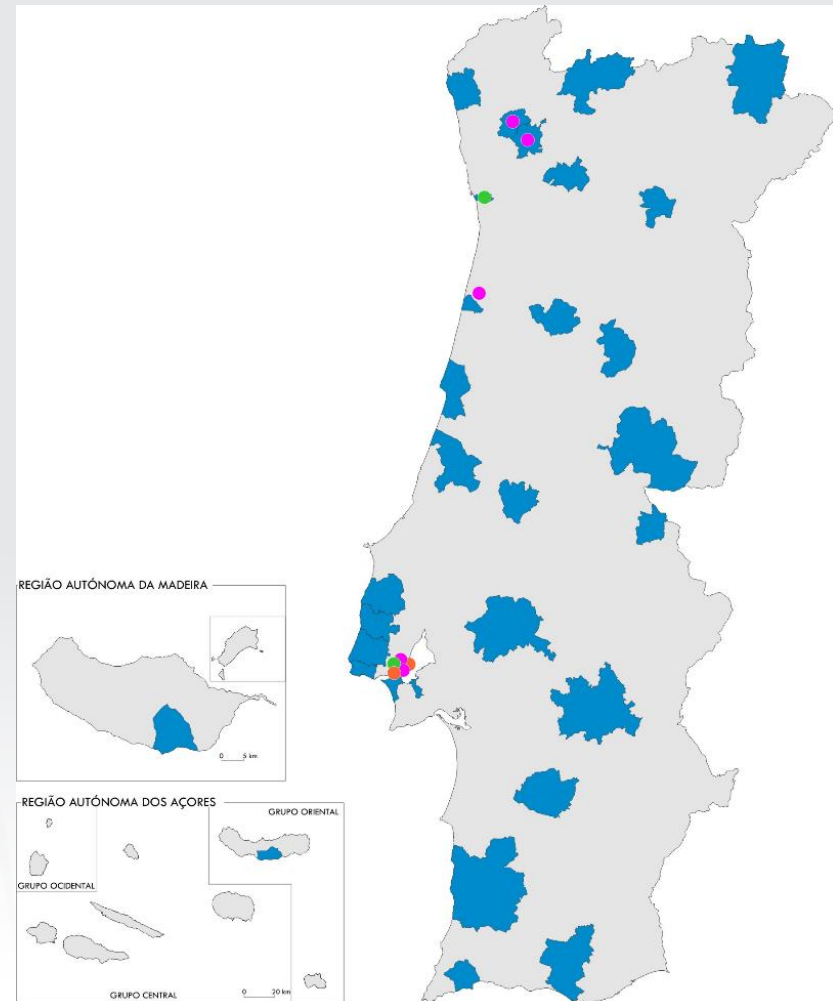


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Municipal Network: mission

Foster the capacity of Portuguese municipalities to incorporate climate adaptation into their policies, planning instruments and local actions





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Municipal Network: objectives

- To encourage the **sharing of knowledge and experiences on adaptation** between local authorities, academic institutions, private companies and associations.
- To stimulate further **cooperation at the international level**, with other networks and structures, by facilitating the incorporation of new approaches and solutions, and disseminating local practices.
- To contribute for the adoption of **policies, programmes, measures and legislation** that will improve adaptation at the local level.
- To create appropriate **financial instruments** to support the implementation of municipal plans and strategies for climate adaptation.
- To **mobilize local communities** for climate action – **LOCAL MONITORING COMMITTEES**



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• Rethink a new ethos for adaptation?

Potential of adaptation as a transitional process
(Pelling 2011 & 2012):

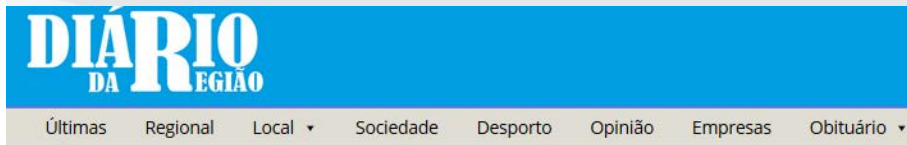
- ClimAdaPt.Local **promoted innovation** to social, economic, political and cultural relations and
- Could potentially lead to a **regime change** as a result of the governance and learning dynamics during the process



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Communication strategies: media coverage and comic book

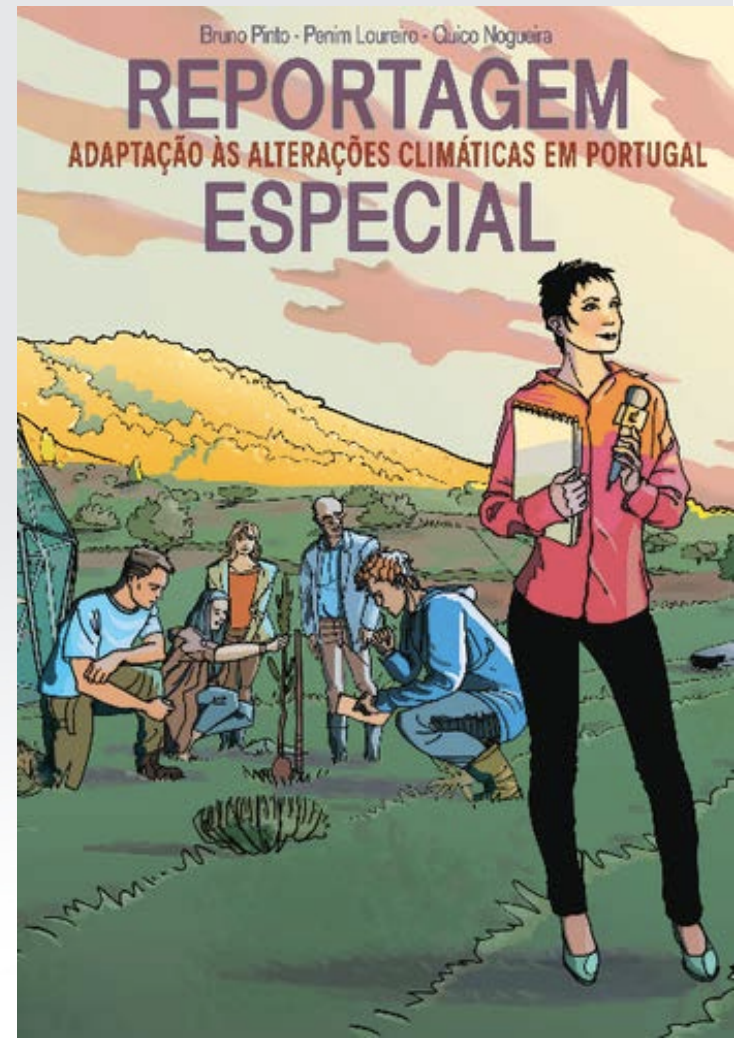


Rede de Municípios para a Adaptação Local às Alterações Climáticas fundada por 30 autarquias

21/12/2016



A Rede de Municípios para a Adaptação às Alterações Climáticas foi fundada por 30 autarquias portuguesas, a 9 de Dezembro, no Seminário de Encerramento do ClimAdaPT.Local.





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Thank you!
Vielen Dank!
Obrigado!
Gratias

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