



International Urban Cooperation (IUC)

City-to-City Cooperation Program



Birmingham (USA) – Padova (Italy)

24/09/2020



A European Union
Programme

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Filippo Magni, PhD
IUAV UNIVERSITY OF VENICE
Department of Architecture and Arts



MASTER ADAPT

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

Integrating the adaptation actions into local public policies: the Master Adapt EU project

Filippo Magni, PhD

Università IUAV di Venezia
Dipartimento di Culture del Progetto

24/09/2020

**International Urban Cooperation (IUC)
City-to-City Cooperation Program**



Con il contributo dello strumento finanziario LIFE dell'Unione Europea
With the contribution of the LIFE financial instrument of the European Community

LIFE MASTER ADAPT – MAInSTreaming Experiences at Regional and local level
for ADAPtation to climate change - LIFE15 CCA/IT/000061

Coordinatore:



Partners:

AMBIENTEITALIA



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UNIVERSITÀ DEL SUD

FLA
Fondazione lombarda
per l'Ambiente

ISPRA
Istituto Superiore per lo Studio e la Cura degli Ambienti

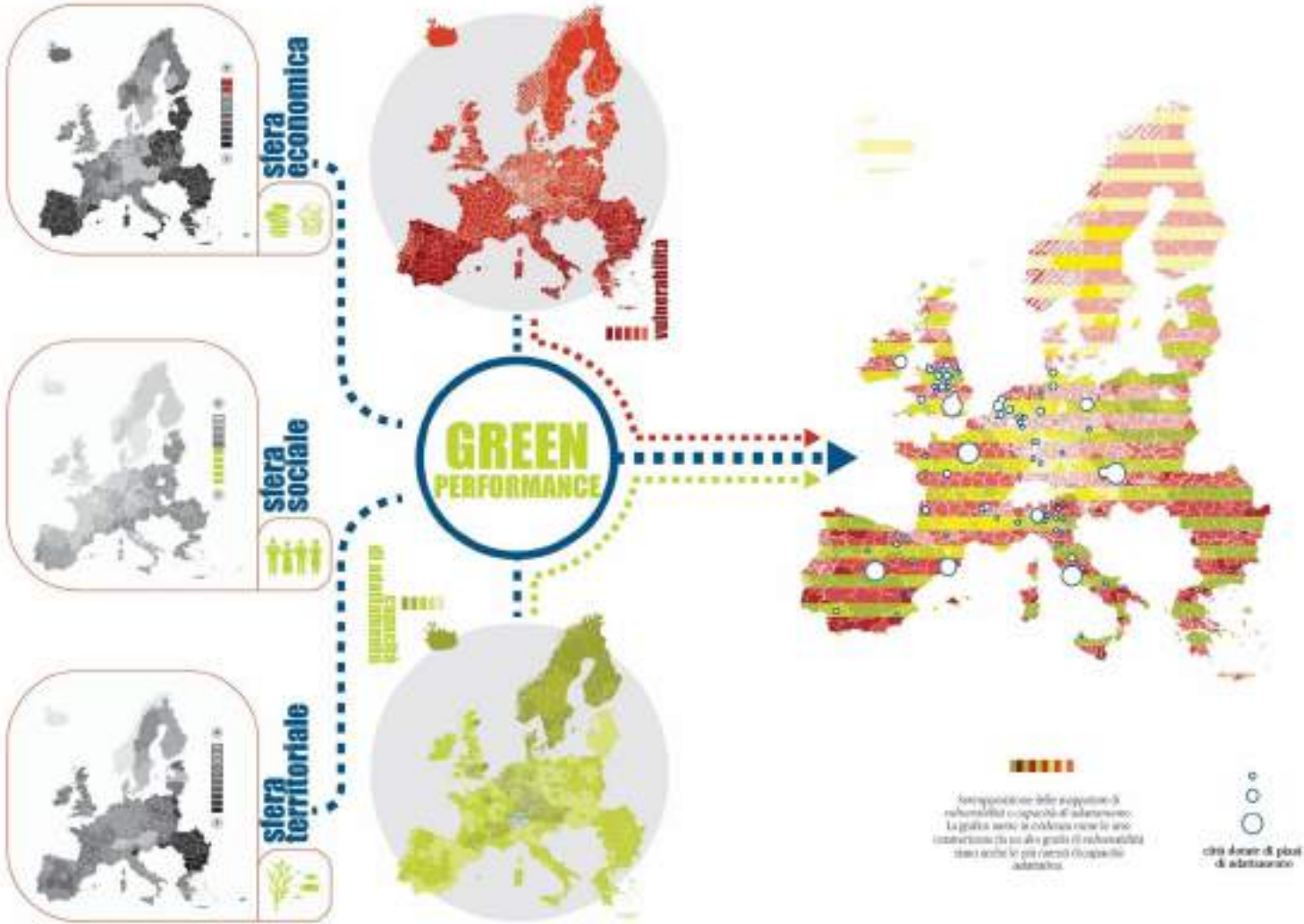
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Regione
Lombardia

Con il contributo di:

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cariplo

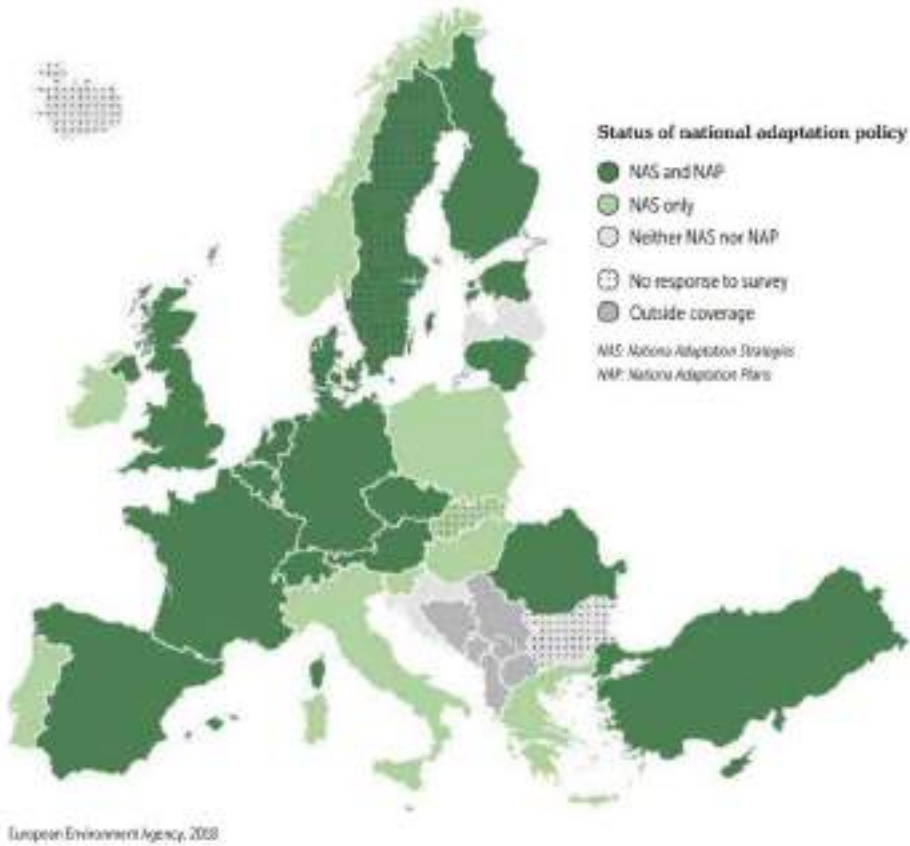
Europe is in a very innovative phase of climate policies involving planning skills:



Master Adapt: a Starting point 1

Europe is in a very innovative phase of climate policies involving planning skills:

EEA member countries	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	Adaptation policy progress as reported by European countries to Question 12 of the self-assessment survey
Austria											Implementation
Belgium											Implementation
Bulgaria											Formulation
Croatia											n/a
Cyprus											Formulation
Czech Republic											Formulation
Denmark											Implementation
Estonia											Formulation
Finland											Monitoring and evaluation
France											Monitoring and evaluation
Germany											Implementation
Greece											Agenda setting
Hungary											Decision
Iceland											n/a
Ireland											Decision
Italy											Formulation
Latvia											Formulation
Liechtenstein											Formulation
Lithuania											Monitoring and evaluation
Luxembourg											n/a
Malta											Implementation
Netherlands											Implementation
Norway (*)											Monitoring and evaluation
Poland											Decision
Portugal											Decision
Romania											Decision
Slovakia											Formulation
Slovenia											Formulation
Spain											Implementation
Sweden											Formulation
Switzerland											Implementation
Turkey											Decision
United Kingdom											Implementation



Note: No policy
 National adaptation strategy (NAS) in place
 National adaptation strategy (NAS) and national and/or sectoral adaptation plans (NAP/SAP) in place

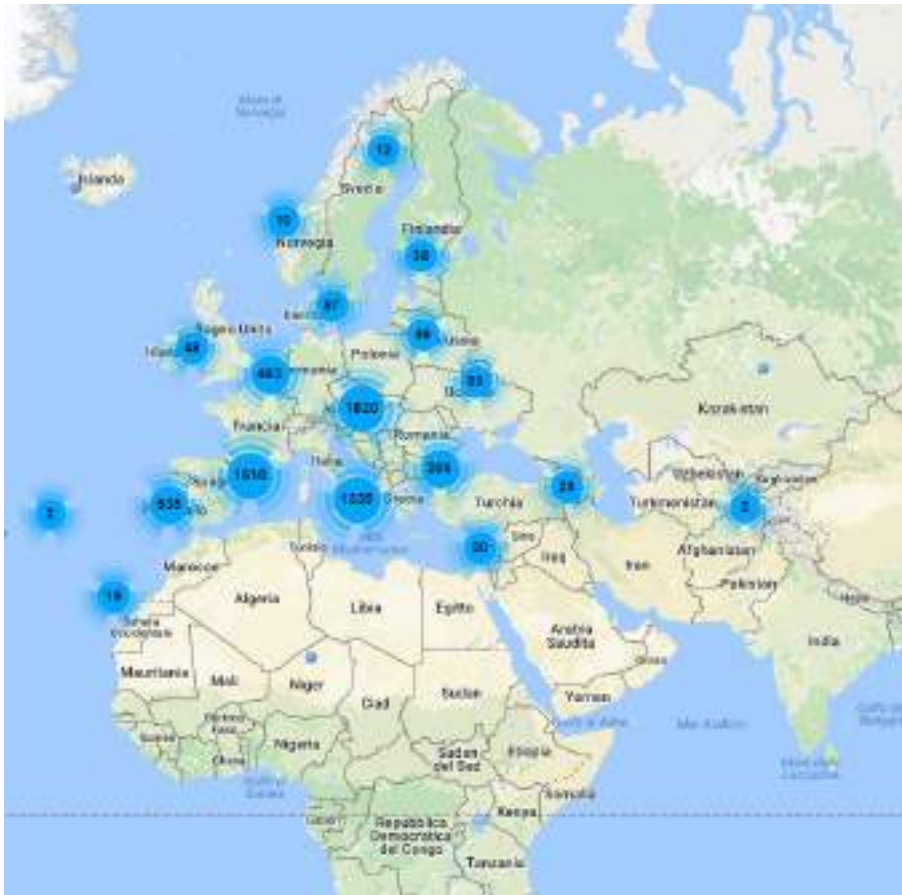
Master Adapt: a Starting point 1

The Local Level

City	Country	Plan	Network
Alba	Italia	Local Adaptation Plan to Climate Change	Agenda 21, EU Cities Adapt, Mayors Adapt
Almada	Portogallo	Almada's Adaptation Strategy	ICLEI, Agenda 21, CCP, EU Cities Adapt, Mayors Adapt
Amburgo	Germania	Climate Action in Hamburg	ICLEI
Amsterdam	Olanda	Climate Change Adaptation Action Plan (AAP).	C40, CCP, Agenda 21, GRaBS Project,
Ancona	Italia	ACT- Adapting to climate Change in Time	ICLEI, Agenda 21, ACT Project EU Cities Adapt,
Anversa	Belgio	Implementation of EU Commitments: Covenant of Mayors and Mayors Adapt, A Tailored Approach 2015-2020	ICLEI, Mayors Adapt,
Arnhem	Olanda	City Structure Vision 2020-2040	Mayors Adapt,
Arnsberg	Germania	Integrated Climate Protection Concept	Mayors Adapt
Barcellona	Spagna	Barcelona Resiliente	C40, ICLEI, 100 Resilient Cities, Agenda 21, GCCC, CCP, EU Cities Adapt, Mayors Adapt,
Birmingham	Inghilterra	Birmingham Climate Change Strategic Framework	ICLEI, CCP, Agenda 21, EU Cities Adapt,
Bologna	Italia	Bologna Local Urban Environment Adaptation Plan for a Resilient City – Blueap	ICLEI, Agenda 21, CCP, Mayors Adapt,
Bratislava	Slovacchia	Adaptation action plan Bratislava	EU Cities Adapt, Mayors Adapt,
Bullas	Spagna	Local Adaptation Plan to Climate Change	ACT Project, Mayors Adapt
Burgas	Bulgaria	Burgas Municipality Regional Development Plan 2014-2020	ICLEI, CCP, EU Cities Adapt, Mayors Adapt,
Copenhagen	Danimarca	Copenhagen Climate Adaptation Plan	C40, ICLEI, Agenda 21, GCCC, CCP, Mayors Adapt
Dresda	Germania	Regional Climate Change Adaptation Programme Dresden Region	ICLEI, CCP, Agenda 21, EU Cities Adapt
Dublino	Irlanda	Climate City Plan	ICLEI, EU Cities Adapt, Mayors Adapt
Edimburgo	Scozia	Resilient Edinburgh: Climate Change Framework 2014-2020	ICLEI, Mayors Adapt,
Francoforte	Germania	Climate Change Adaptation Strategy	Mayors Adapt
Friburgo	Germania	Action Plan for Climate	ICLEI, CCP
Gibilterra	Inghilterra	Adaptation strategy for Gibraltar	
Glasgow	Scozia	Climate Ready Clyde Vision	ICLEI, 100 Resilient Cities, Agenda 21, Mayors Adapt
Greater Manchester	Inghilterra	Greater Manchester Climate Change Strategy (GMCCS) / Climate Change Strategy Implementation Plan (CCSIP)	Agenda 21
Hannover	Germania	Climate Change Adaption Strategy for the City of Hannover	ICLEI, CCP, Agenda 21, Mayors Adapt
Lahti	Finlandia	Lahti City Strategy 2025	ICLEI, Agenda 21, CCP, EU Cities Adapt
Leicester	Inghilterra	City of Leicester Climate Change Strategy	CCP, Agenda 21, Mayors Adapt
Londra	Inghilterra	Managing risks and increasing resilience Plan	C40, 100 Resilient Cities, Agenda 21, CCP, GRaBS Project
Madrid	Spagna	Plan de Uso Sostenible de la Energia y Prevención del Cambio Climatico	C40, Agenda 21, Mayors Adapt,
Malmö	Svezia	Malmö Climate Plan	ICLEI, EU Cities Adapt, GRaBS Project,
Monaco di Baviera	Germania	Strategic Guidelines on Climate Change Mitigation and Adaptation	Mayors Adapt
Newcastle	Inghilterra	Climate Change Strategy and Action Plan 2010-2020	ICLEI, Agenda 21, Mayors Adapt,
Nijmegen	Olanda	Water and Sewer Plans Nijmegen	ICLEI, Mayors Adapt,
Padova	Italia	Piano clima	Agenda 21, EU Cities Adapt
Parigi	Francia	Plan Climat de Paris	C40, ICLEI, 100 Resilient Cities, GCCC
Rotterdam	Olanda	Rotterdam climate proof	C40, ICLEI, 100 Resilient Cities, Agenda 21, EU Cities Adapt, Mayors Adapt,

Master Adapt: a Starting point 2

According to a mitigation perspective, **the success of the "Covenant of Mayors" program demonstrates the EU's central role in dealing directly with local policies** (of common and public interest), without the intermediate role of individual countries;



Covenant of mayor in figures:

9826 Signatories

8396 Mitigation (2020 target)

2288 Adaptation

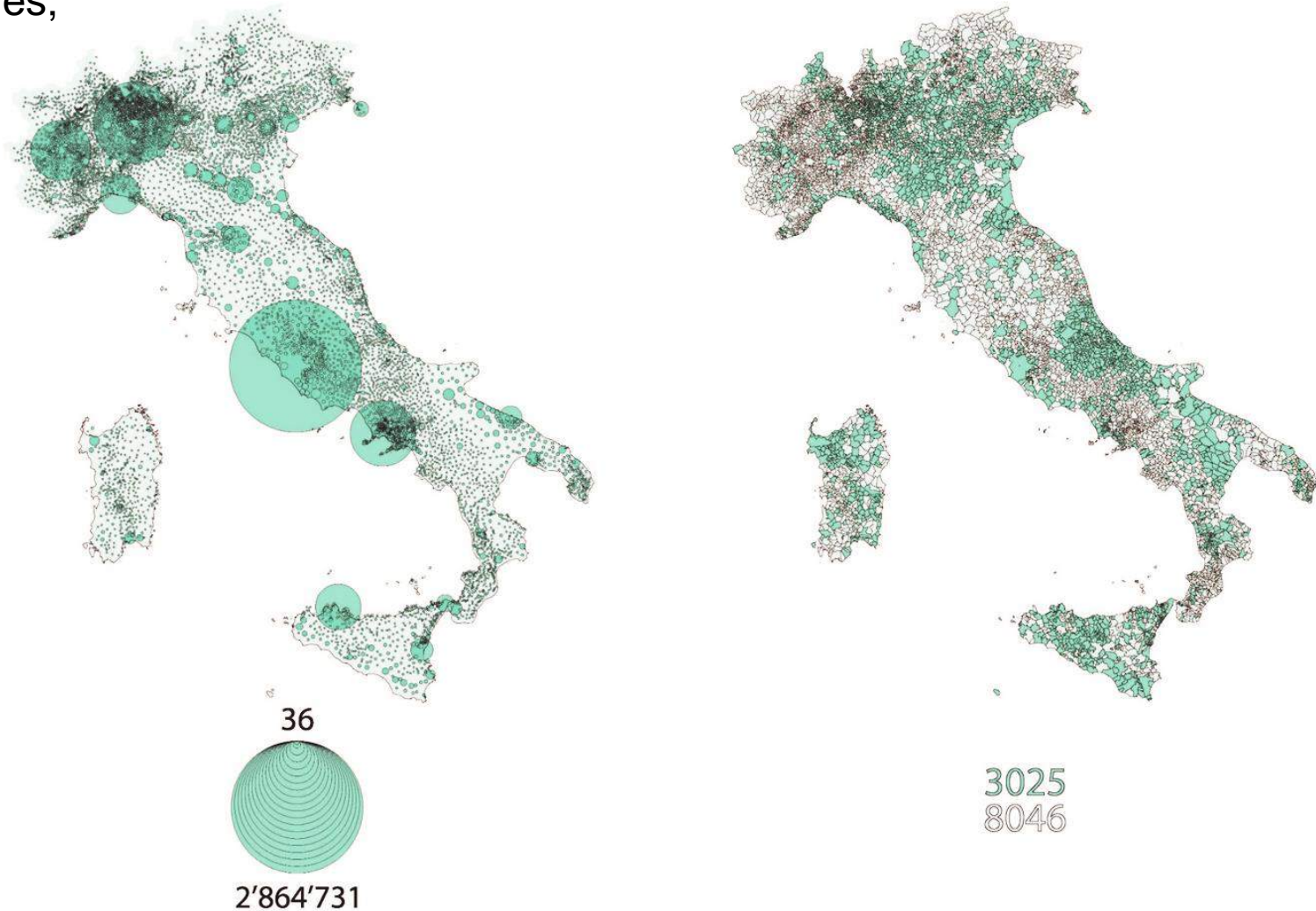
2165 Mitigation (2030 target)

219 Covenant Coordinators

198 Covenant Supporters

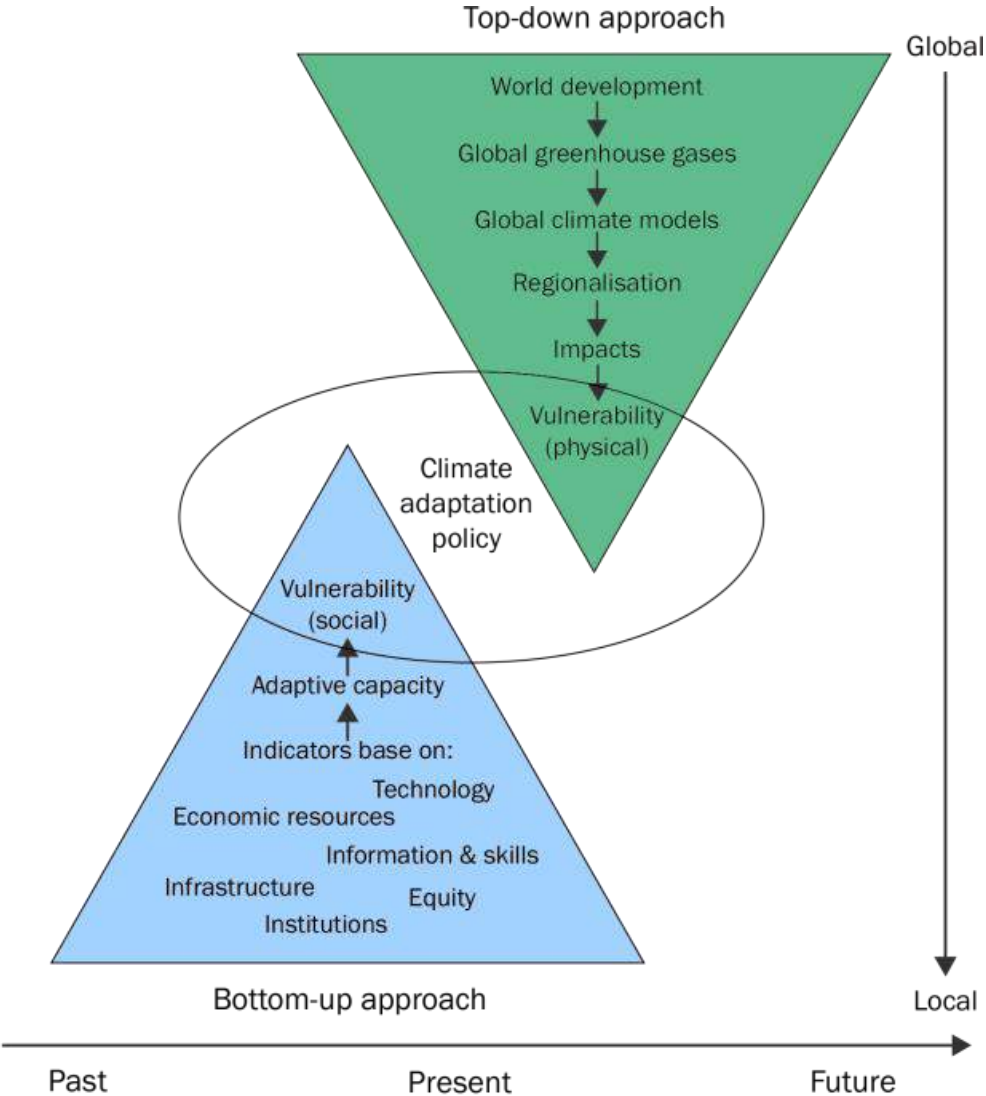
Master Adapt: a Starting point 2

According to a mitigation perspective, **the success of the "Covenant of Mayors" program demonstrates the EU's central role in dealing directly with local policies** (of common and public interest), without the intermediate role of individual countries;



Master Adapt: a Starting point 3

The connection with "ordinary planning tools" is still weak in many cases, or left to local voluntary innovation alone



Master Adapt: a Starting point 3

Definition of barriers

Barriers are defined as obstacles that can be overcome with a concerted effort, creative management, a change in institutional thinking, priorities and consequent shifts of resources (Adger et al., 2005)

Main barriers to action

- **Lack of information for decision making**
(Hauser and Jadin 2012; Kareiva 2008; Kerr 2011)
- **Lack of economic resources**
(Brugger and Crimmins 2011; Needham et al, 2012; Simmonds 2011)
- **Fragmentation of decision-making**
(Horton et al, 2012; Lebow et al, 2012; Winkler et al 2012)
- **regulatory and institutional constraints**
(Adger et al 2009; Garfin et al, 2012; McNeeley 2012)
- **Lack of leadership**
(Moser and Ekstrom 2012; Smith et al. 2009)
- **the uneven risk perception**
(Kahan et al 2007; Leiserowitz 2006; Verweij et al 2006)

Overcome Barriers: A challenge for governance

The main governance challenges

- **HORIZONTAL INTEGRATION** of climate policy in all areas of public policy
(Burton et al, 2006; European Commission, 2007; FAO, 2007; Yohe et al., 2007)
- **VERTICAL INTEGRATION** of levels of government
(Benz, 2004; Adger et al., 2005; Schimank, 2007 (Klein et al., 2007).
- **INTEGRATION OF KNOWLEDGE** useful for decision-making
(Barnett, 2001; Ford, 2008; Tol, 2005)
- **STAKEHOLDER ENGAGEMENT** that are involved by climate change
(Nelson et al, 2007;. Paavola, 2008; Fiorino, 1990; OECD, 2008;. Yohe et al, 2007)

Overcome Barriers: A challenge for governance

Problems to be solved to overcome barriers

- **Internal problem in the administration**

(Allman et al., 2004; Baker and Eckerberg, 2008; Lombardi et al., 2011; Wilson, 2010)

- **Problems of decision-making**

(Pressman and Wildavsky, 1973; Balducci, 1991; Tooth, 1996; Fareri 1990)

- **Problems of tools**

(Palermo, 2008)

- **Problems of implementation strategies**

(Bulkeley and Kern, 2006; Corfee-Morlot et al., 2009).

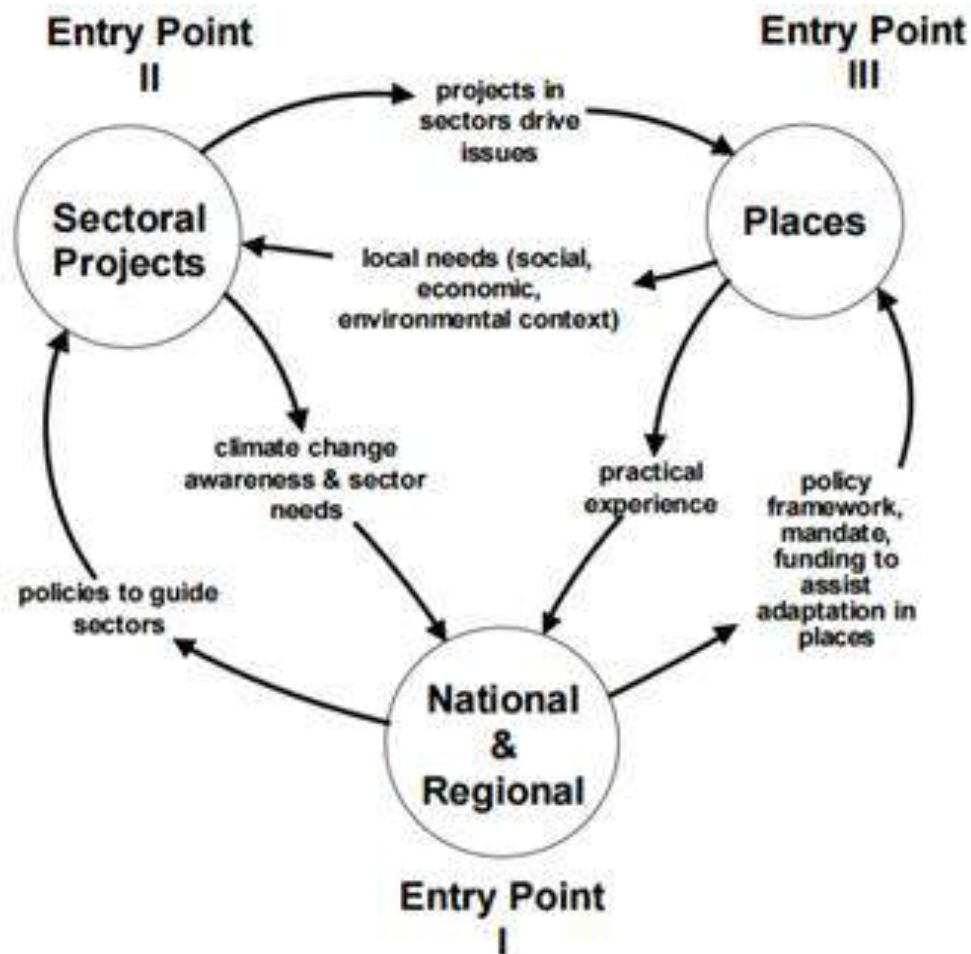


**Mainstreaming as a transversal
adaptation action**

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Mainstreaming as a transversal adaptation action

In the context of climate change, "mainstreaming" refers to the **inclusion of the climatic aspect in development programs, policies or management strategies**, already established or being implemented, rather than the development of separately implemented adaptation and mitigation initiatives.



Il progetto Master Adapt

«**MA**in **ST**reaming **E**xperiences at **R**egional and local level for **ADAPT**ation to climate change»

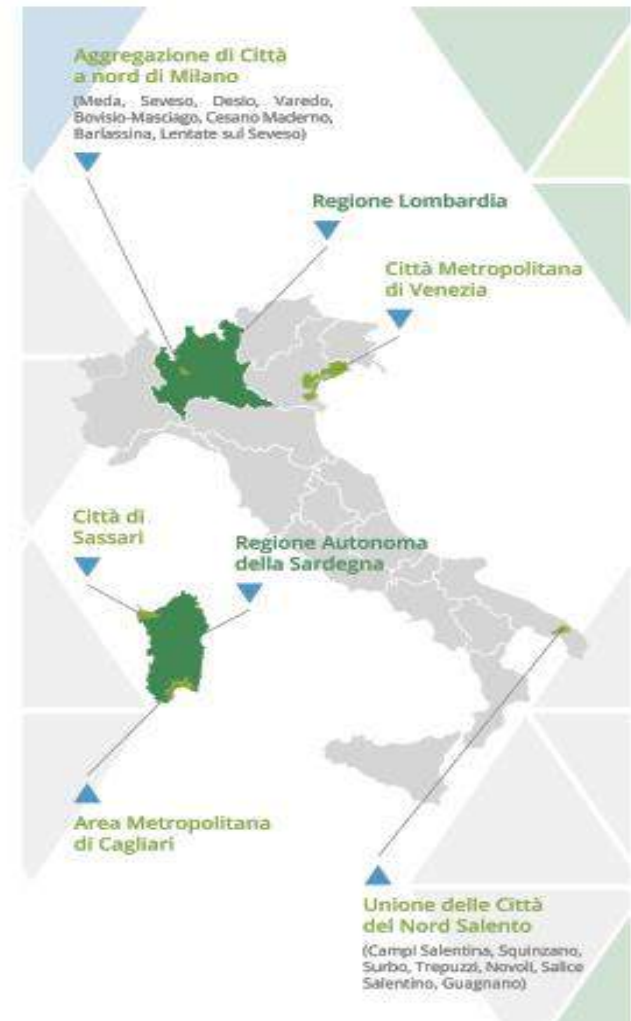
Aims to identify and test a **methodology for the inclusion of climate change adaptation strategies in sectoral and territorial policies** (mainstreaming process) at regional and local level, in particular on urban areas (metropolitan cities and municipalities aggregations).

Mainstreaming as a transversal adaptation action

MASTER ADAPT aims to respond to the impacts created by climate change, through the identification, verification and dissemination of **multi-level governance tools** to support regional and local authorities in the process of integrating adaptation into sectoral policies.

TERRITORI COINVOLTI

+ Regione Autonoma della Sardegna
+ Area Metropolitana di Cagliari
+ Città di Sassari
+ Aggregazioni di Città a nord di Milano
+ Città Metropolitana di Venezia
+ Unione delle Città del Nord Salento
+ Regione Lombardia



Project partner

Regione Autonoma della Sardegna - **RAS_Amb**

Regione Lombardia - **RL_Amb**

Università IUAV di Venezia - **IUAV**

Università di Sassari - **DipNET**

Istituto Superiore per la Protezione e la Ricerca Ambientale - **ISPRA**

Fondazione Lombardia per l'Ambiente - **FLA**

Coord. Agende 21 Locali Italiane - **CA21L**

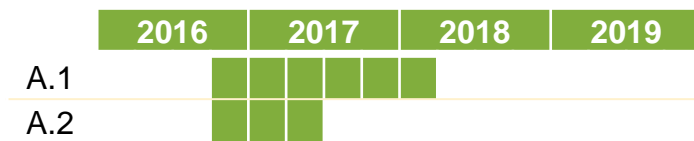
Ambiente Italia srl - **AMBIT**

*Fondazione Cariplo – **cofinanziatore privato***

Preparatory actions

A1. **Climate analysis and vulnerability assessment** at regional and local level

A2. **Evaluation of mainstreaming processes** in selected experiences in the European context



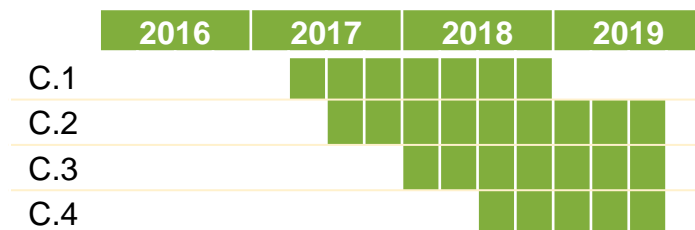
Implementation (core actions)

C1. **Process of defining the adaptation objectives** at the regional and local level

C2. **Methodology for mainstreaming** and multi-level governance for the definition of regional adaptation strategies

C3. **Integration of adaptation strategies and measures** for the intermediate administrative level (groups of municipalities and metropolitan cities)

C4. **Guidelines for Replicability and Transfer of Results**





MASTER ADAPT

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at Regional and local level
for ADAPTation to climate change



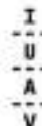
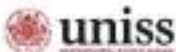
Guidelines for the implementation of mainstreaming in GROUPS OF MUNICIPALITIES

Musco F., Magni F., Litt G., Carraretto G. (IUAV)

Coordinatore:



Partners:



Con il contributo di:



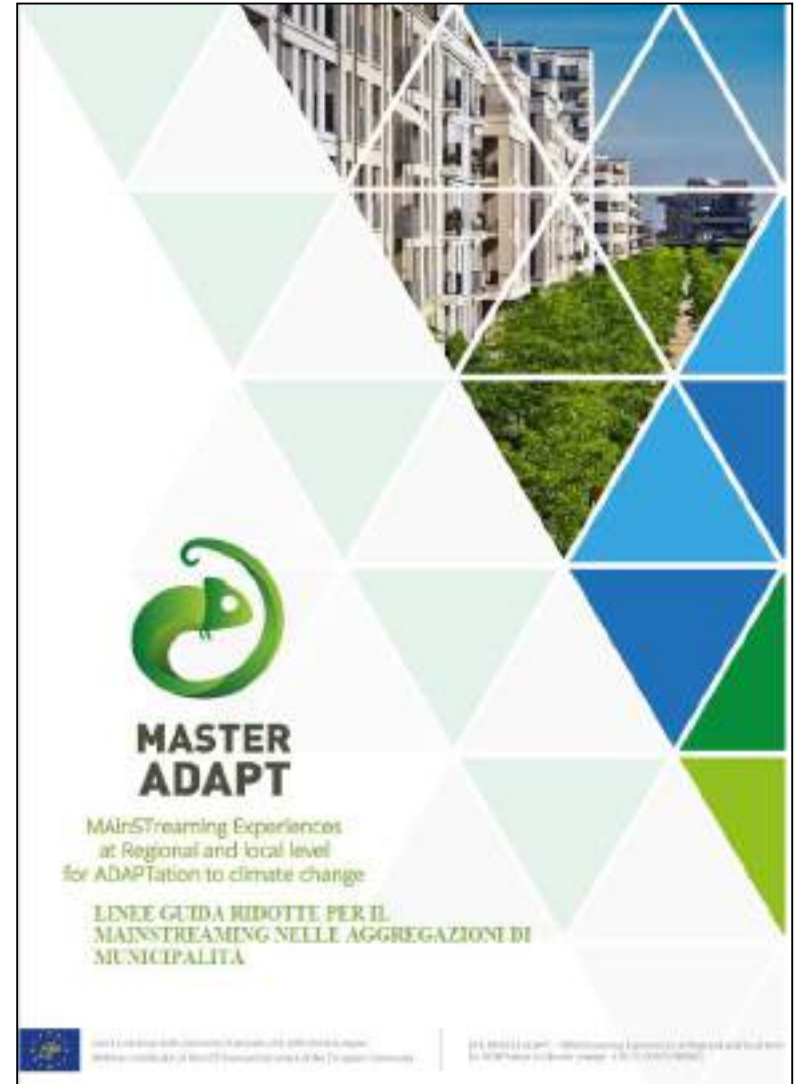
Con il contributo dello strumento finanziario LIFE dell'Unione Europea

LIFE MASTER ADAPT – MAInSTreaming Experiences at Regional and local level
for ADAPTation to climate change - LIFE15 CCA/IT/000061

Introduction

These guidelines are mainly addressed to policy makers and technical offices of the Municipalities belonging to **GROUPS OF MUNICIPALITIES** or part of **Groups of Municipalities**, but also to individual Municipalities that may be interested.

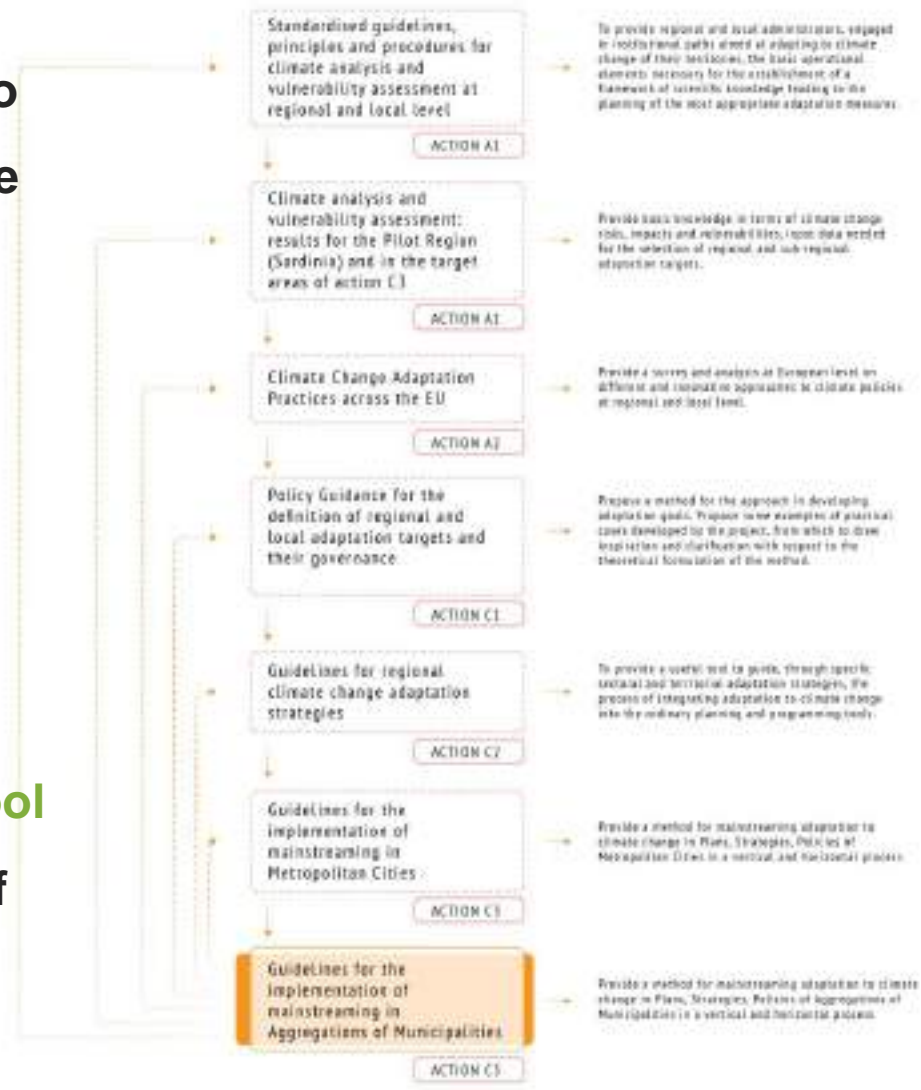
This document aim to provide a **useful tool to guide the process** of mainstreaming of adaptation to climate change in voluntary\mandatory planning tools and policies.



Introduction

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This document aim to provide a **useful tool to guide the process** of mainstreaming of adaptation to climate change in voluntary\mandatory planning tools and policies.



Description of the document

1

The document is structured in two parts:

The first part, considered as introductory, contains a **general introduction** to the theme and context within which adaptation to climate change in public administrations operates today;

The second part contains the **guidelines for the mainstreaming** of adaptation to climate change within the territorial governance processes specifically assigned to the **groups of municipalities.**

Description of the document

2

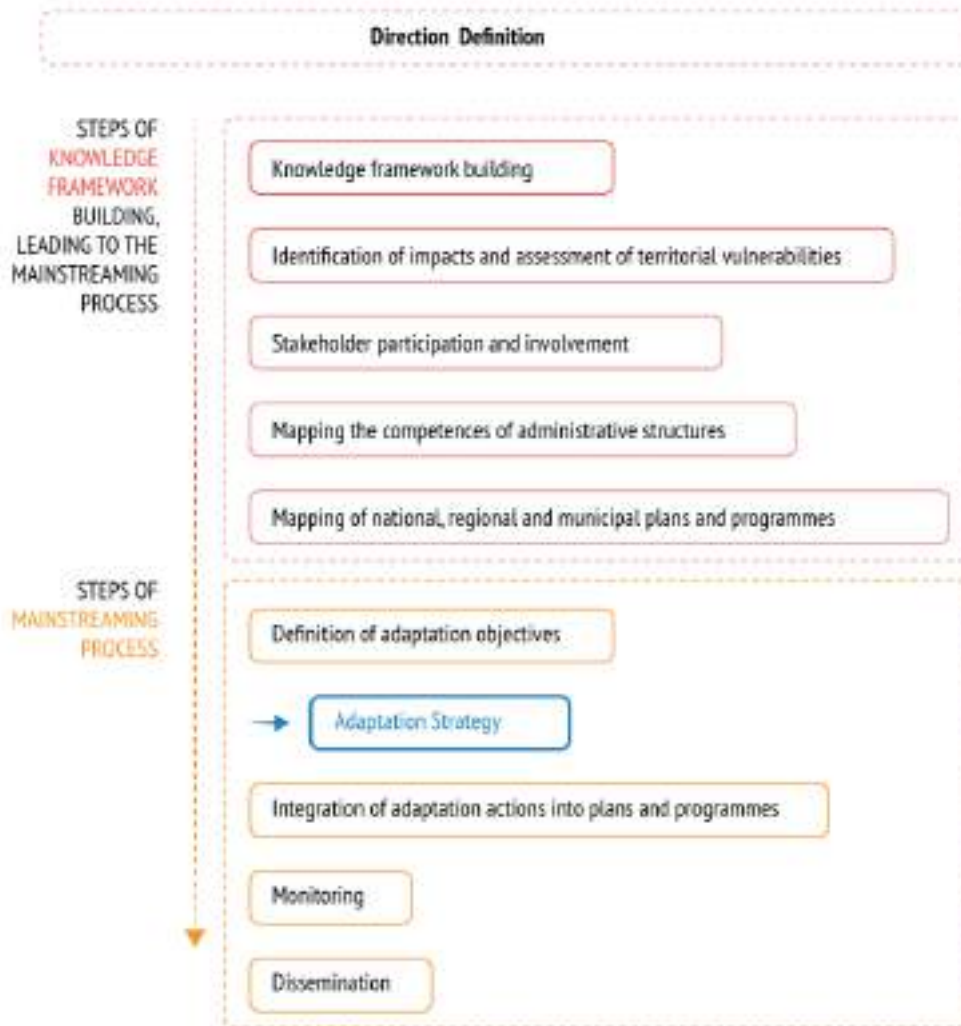
The first part: general introduction



Description of the document

3

The second part : guidelines for the mainstreaming



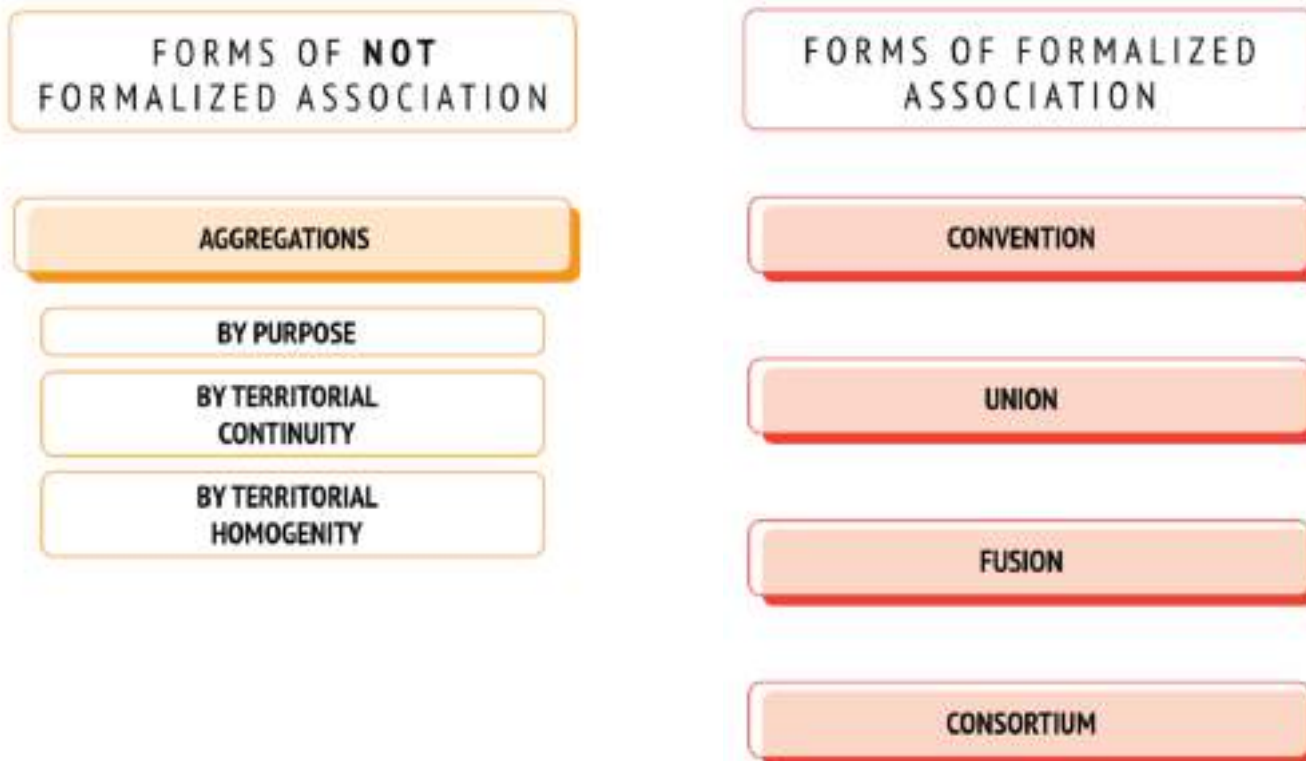
The second part contains the guidelines for the mainstreaming of adaptation to climate change within the territorial governance processes specifically dedicated to Groups of Municipalities.

This section, unlike the previous document, **deepens the guidelines built for the metropolitan level, contextualising them for the level of aggregations of municipalities**, providing as many indications as possible to facilitate the work to the Municipalities involved in the process.

Description of the document

The second part : guidelines for the mainstreaming

The role, the different types and the general approach of a group of Municipalities and the detail of the functioning and purposes of the local level are instead described in the section "**Governance of the mainstreaming process: the role of the Groups of Municipalities**"

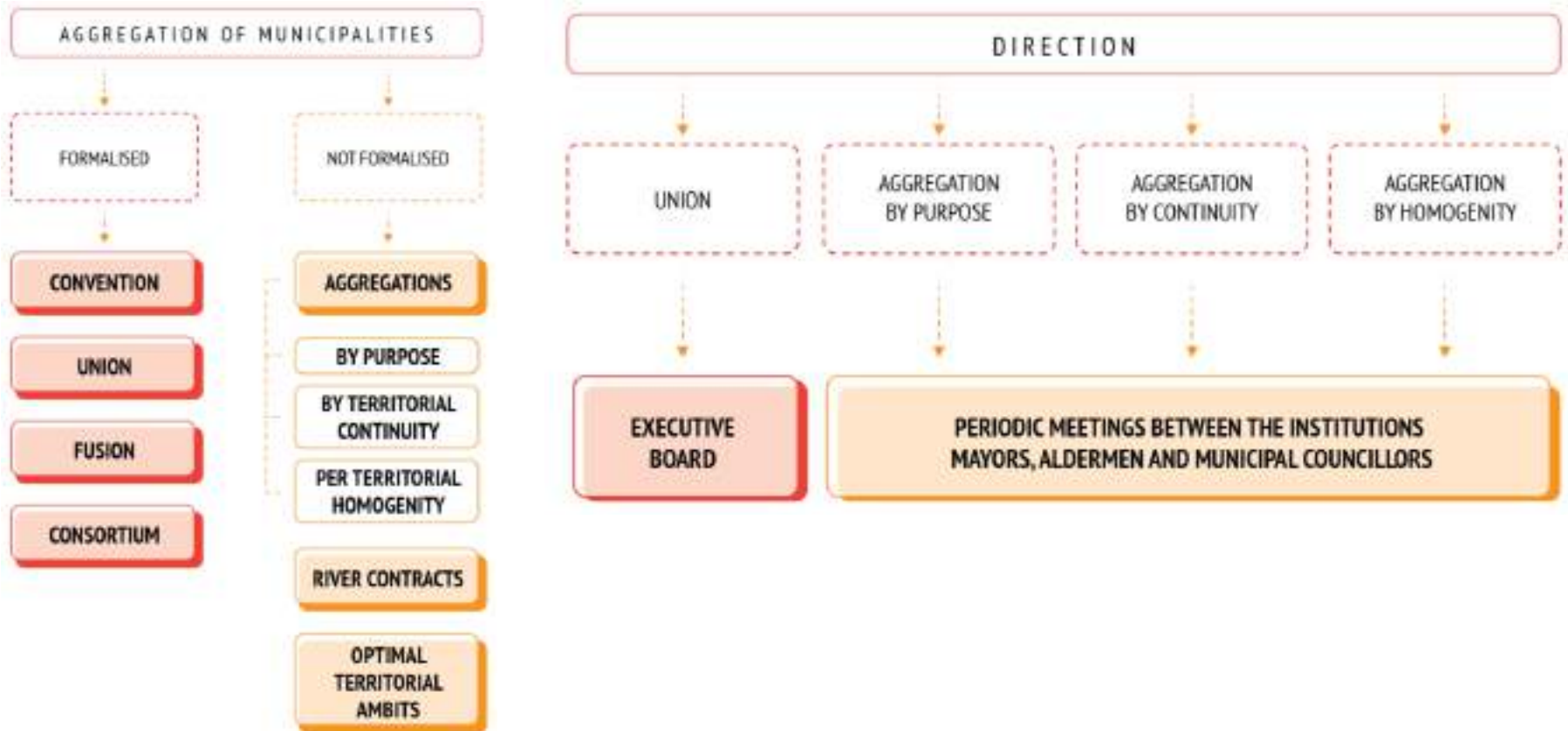


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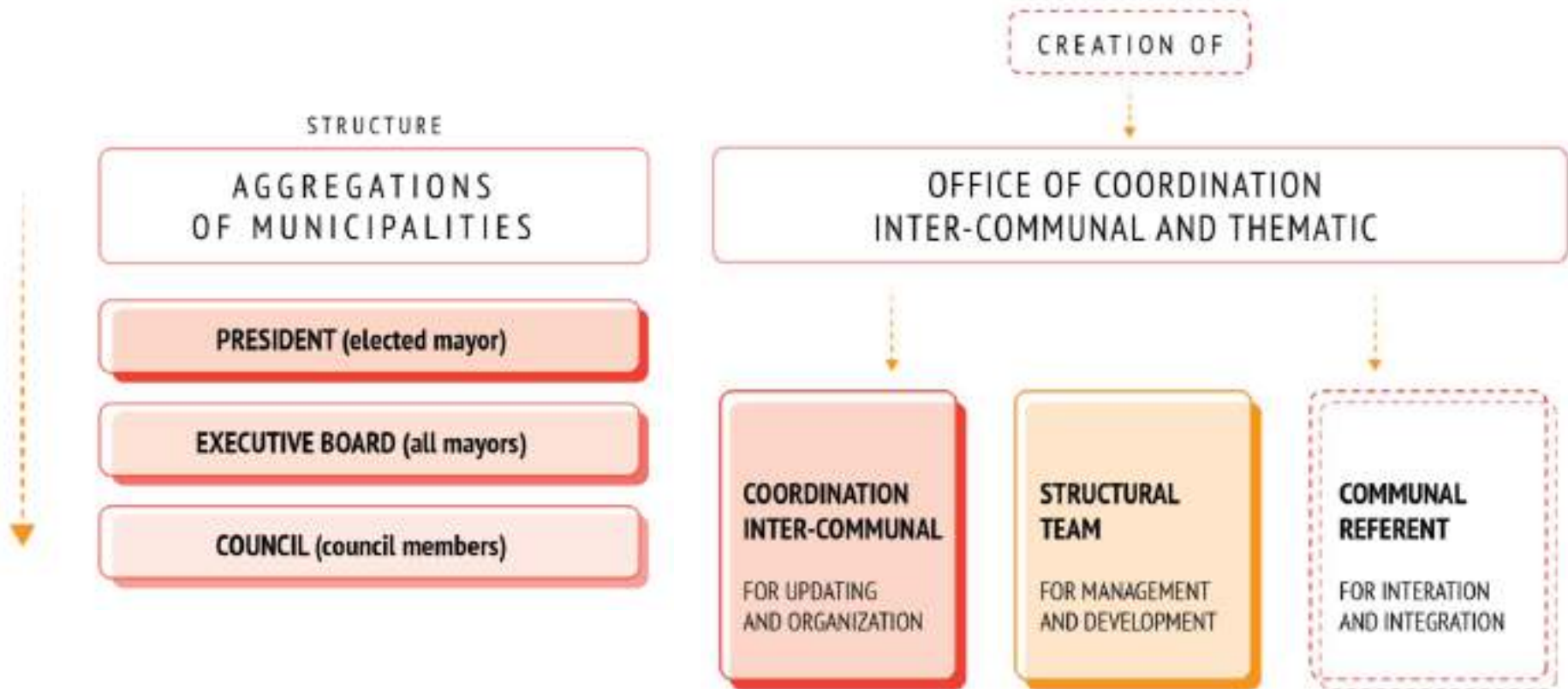
"Governance of the mainstreaming process: the role of the Groups of Municipalities"



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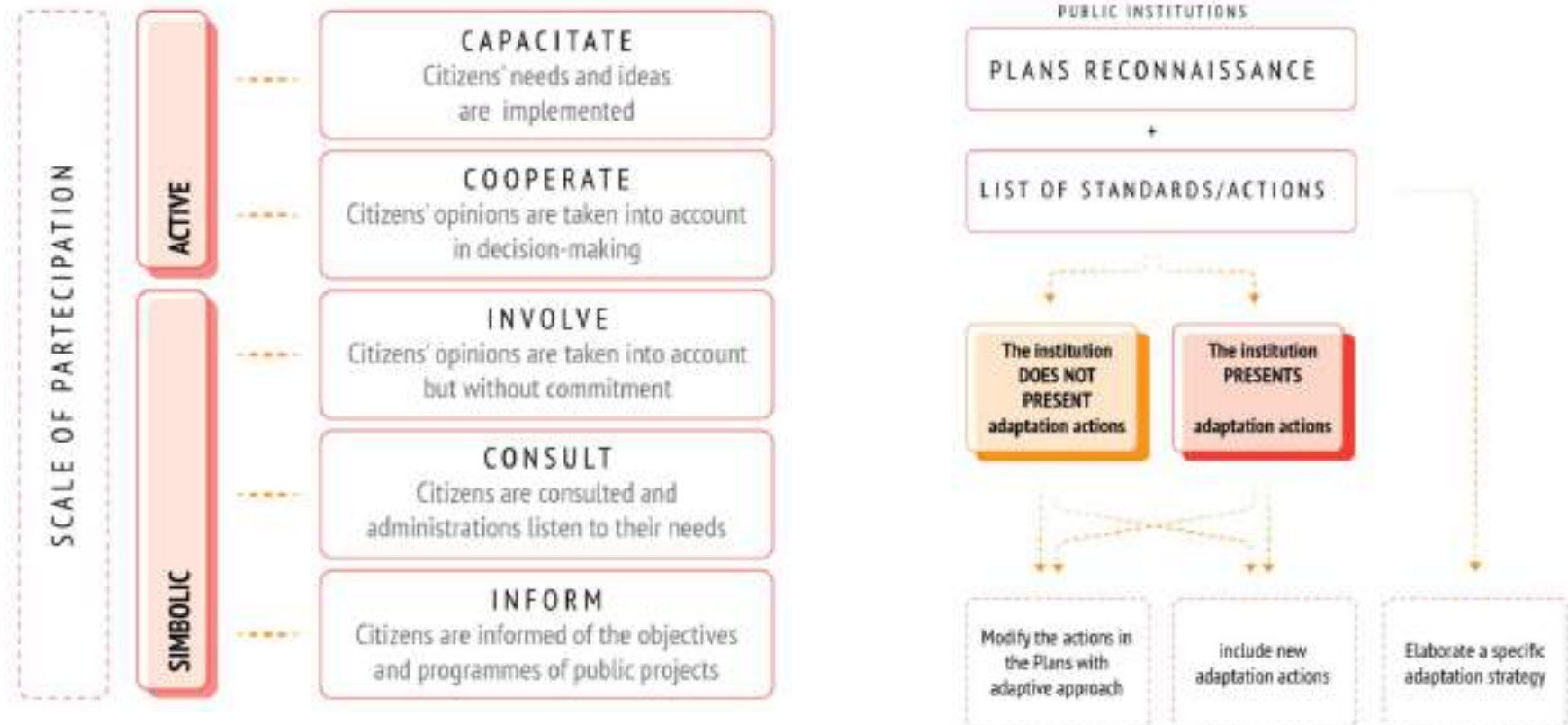


Description of the document

6

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Policy relevance

Support to the Veneto ADAPT project (extended for one year) for the **planning activities** for the adaptation (**definition of the SECAPs**) of the municipalities involved.



**MASTER
ADAPT**

MAInStReaming Experiences
at Regional and local level
for ADAPtation to climate change



**Veneto
ADAPT**



LIFE URBANPROOF
CLIMATE PROOFING
URBAN MUNICIPALITIES

Support for the **definition of the local adaptation strategy** of the municipality of Reggio Emilia (Partner city of the Life Urbanproof project)

Current Direct Involvement



Venezia2021
Programma di ricerca scientifica
per una laguna "regolata"

Definition of an **adaptation strategy for the Venice lagoon**

Interreg
ITALIA-SLOVENIJA



SECAP

Progetto strategico co-finanziato dal Fondo europeo di sviluppo regionale
Strategijski projekt sofinanciran Evropski sklad za regionalni razvoj

Definition of the ITA-SLO **common guidelines for the construction of SECAPs** and other tools for adaptation to climate change



Interreg
Italy - Croatia
Adriadapt



Support for **updating current (ordinary and voluntary) climate adaptation tools**

Support for outgoing projects



Learning by doing:

**Some indications from the
MASTER ADAPT project**

Some indications from the MASTER ADAPT project



1.

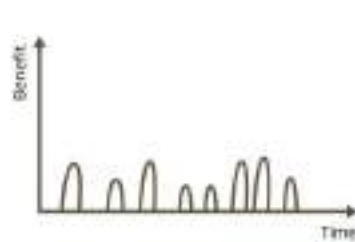
The analysis of adaptation strategies and the consequent risk management are closely connected with adaptation actions, which should necessarily be treated with a decision-making process that takes into **consideration the perception of risk and the needs of a territory, balancing benefits and compromises**.

Some indications from the MASTER ADAPT project

COPING



Purely coping approaches bring short-term benefits that decrease to zero with each new disaster. They therefore imply high costs over time.



INCREMENTAL



Incremental approaches work effectively up to certain risk levels. Benefits level off over time and higher risk levels will require additional coping.



TRANSFORMATIVE



Transformative approaches need some time and efforts at the beginning but then benefits increase and are stable. Very little coping is needed to buffer extremely high risk levels.



- Normal water level
- Water level — 1/50 years flood event
- Water level — 1/100 years flood event

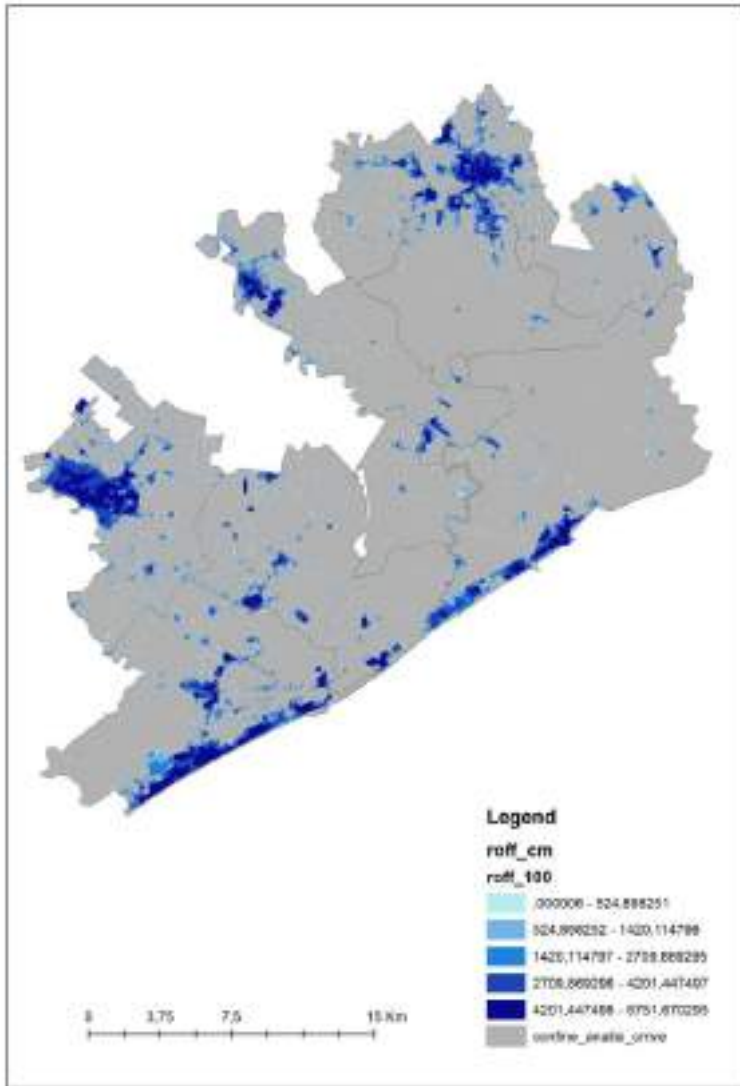
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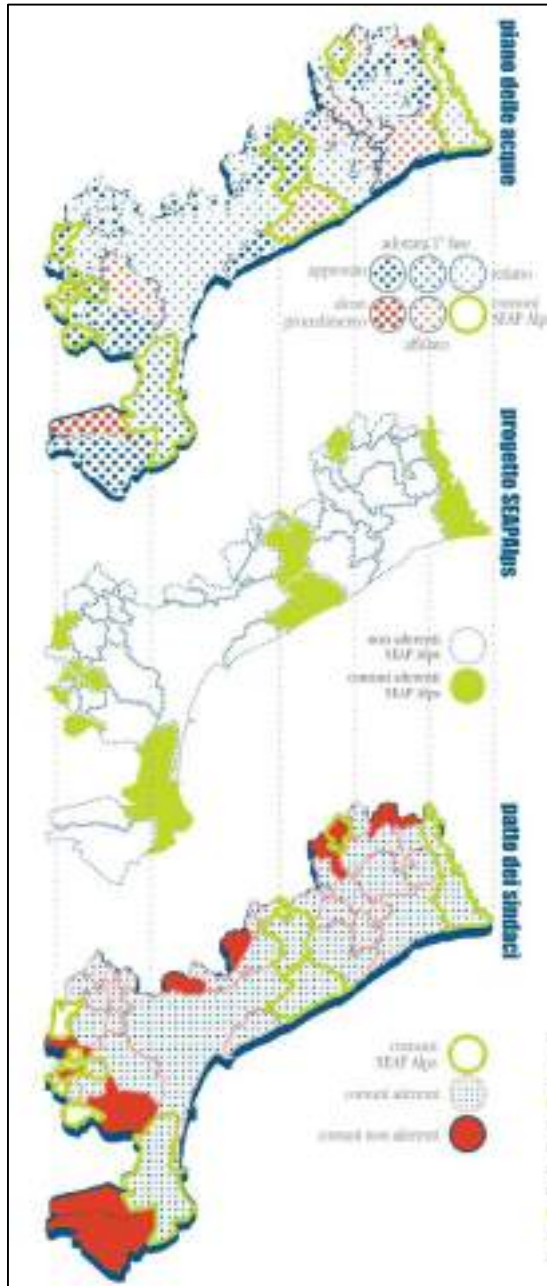
The process identified for mainstreaming adaptation policies in aggregation of municipalities (C3.1) and MC (C3.2) can be considered as a **first step towards a more complete governance of the different issues related to climate change.**

3.

A climate proof urban context requires strategies that exceed the limits of local administrations, which is why in many cases we talk about the implementation gap as a decision-making problem.

The municipal scale is not always the best to govern complex processes and policies





4.

The climate proof initiatives considered by the project were successful experiences since the fulcrum of these experiments was not only born from the far-sighted and innovative vision of local administrations, but also **from the presence of effective top-down framework policies.**



REGIONE AUTONOMA DI SARDEGNA
REGIONE AUTONOMA DELLA SARDEGNA
ASSORBIMENTO DI SA DEFIVVA DE FAMBENTIS
ASSORBIMENTO DELLA DIFESA DELL'AMBIENTE

IL CLIMA CAMBIA, BISOGNA AGIRE ORA!

**Strategia regionale di
adattamento ai
cambiamenti climatici**

INCONTRO DI PRESENTAZIONE

SASSARI 14 FEBBRAIO 2019
SALA ANGIOY DELLA PROVINCIA DI SASSARI, PIAZZA D'ITALIA 31

Ai partecipanti iscritti agli Ordini professionali saranno riconosciuti crediti formativi professionali.



Ordine DOTTORI AGRONOMI
e DOTTORI FORESTALI
della PROVINCIA DI SASSARI



5.

The methodology developed by MASTER ADAPT, and tested in Sardinia, can therefore be considered as a "standard" approach to be transferred to other regions.

The test of the methodologies and tools proposed in the project will allow to identify a clear mainstreaming approach useful for the other Regions that will undertake to start the process of inclusion of the CC issue in their sectoral policies.



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Thanks for the attention



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www.masteradapt.eu

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