



European Committee
of the Regions

Protecting Coastal Cities From Sea Level Rise

*Together we win.
The experiences of city networks
and institutions*

21 luglio 2023

Università Iuav | Venezia



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Green Deal Going Local

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1

FIGHTING CLIMATE CHANGE AS A PRIORITY

Why cannot we wait?

2

EU ACTIONS TO FIGHT CLIMATE CHANGE

Is Europe leading the way?

3

FROM PILOT PROJECTS TO SYSTEMIC CHANGE

Why best practices are not enough?

Why climate change matters?

NO NEED TO BELIEVE ANYMORE

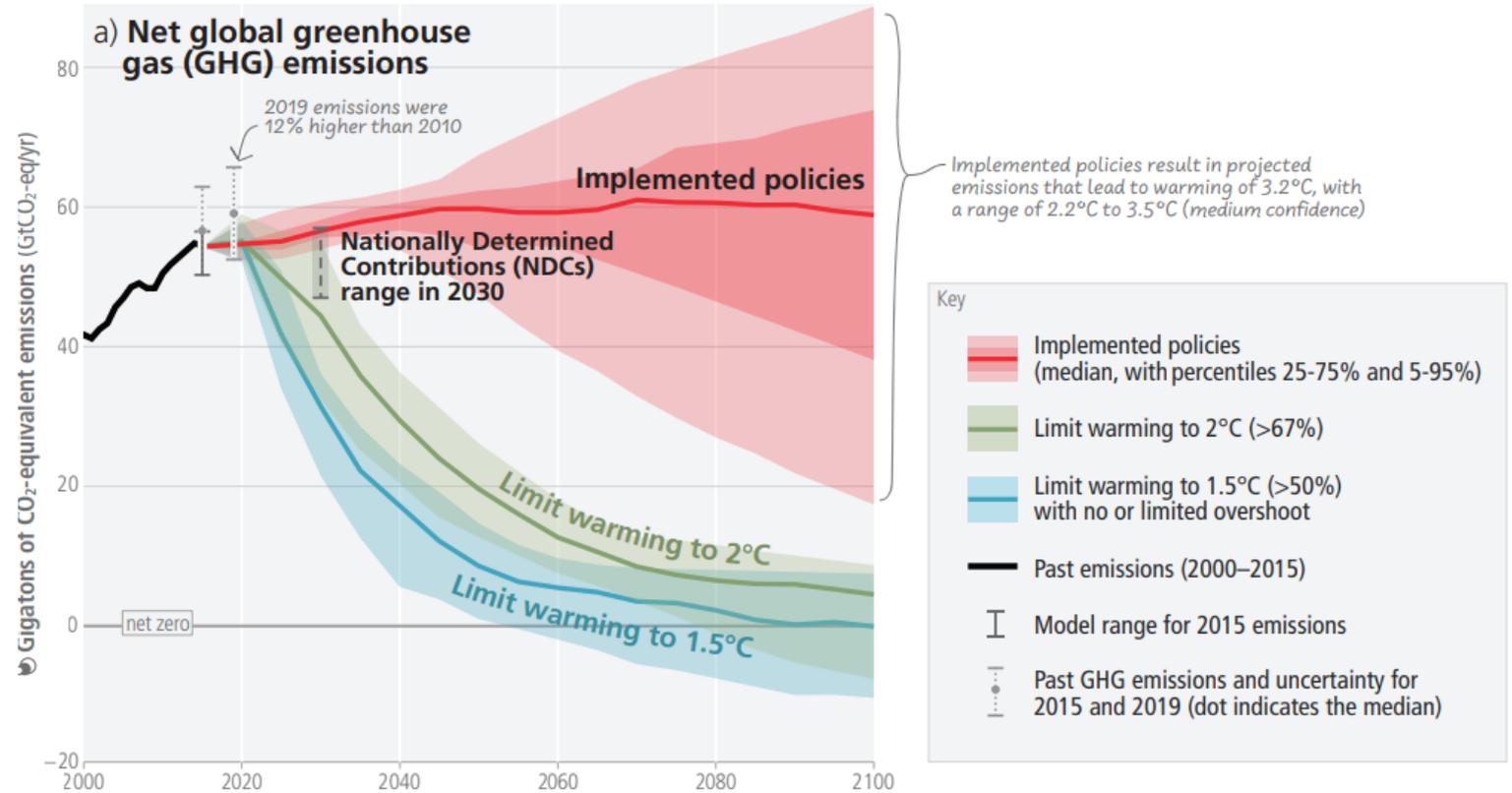
Climate change is now globally recognised as a major threat to long-term prosperity of the human kind. Tackling it requires **deeply transformative action**.



Rapid and systemic change is needed

Limiting warming to 1.5°C and 2°C involves rapid, deep and in most cases immediate greenhouse gas emission reductions

Net zero CO₂ and net zero GHG emissions can be achieved through strong reductions across all sectors

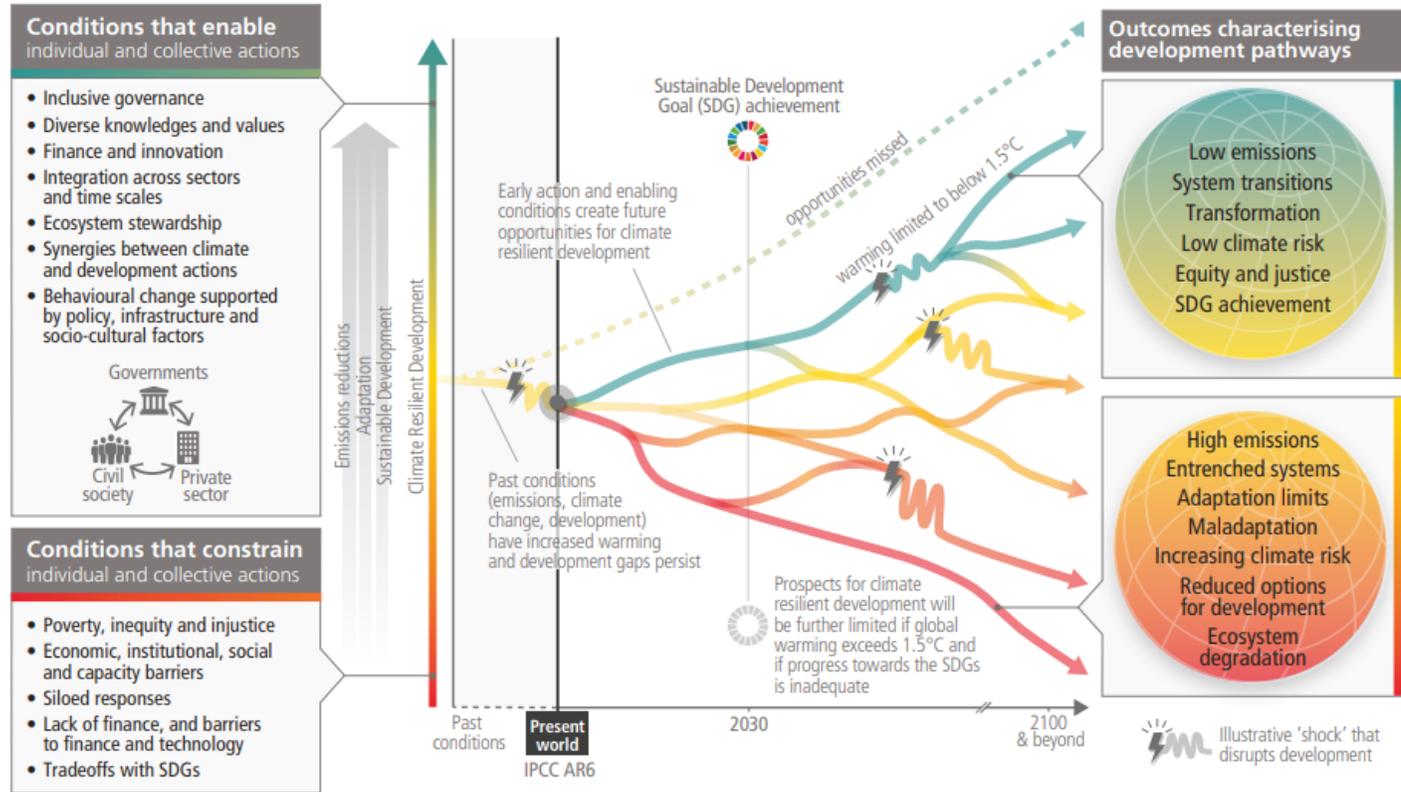


“Climate change is a threat to human well-being and planetary health. There is a rapidly closing window of opportunity to secure a liveable and sustainable future for all. Climate resilient development integrates adaptation and mitigation to advance sustainable development for all, and is enabled by increased international cooperation including improved access to adequate financial resources, particularly for vulnerable regions, sectors and groups, and inclusive governance and coordinated policies. The choices and actions implemented in this decade will have impacts now and for thousands of year.” IPCC 2023

Time for action is now... or never

There is a rapidly narrowing window of opportunity to enable climate resilient development

Multiple interacting choices and actions can shift development pathways towards sustainability



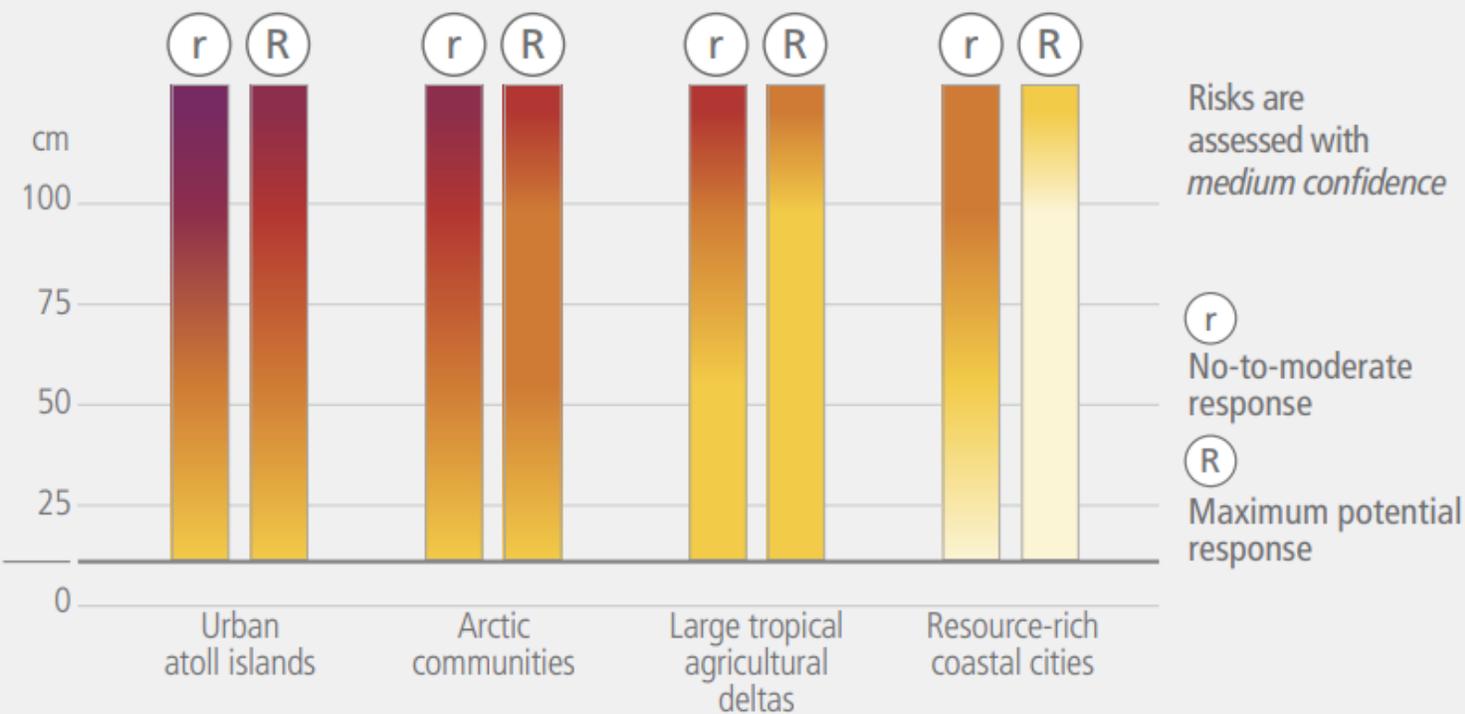
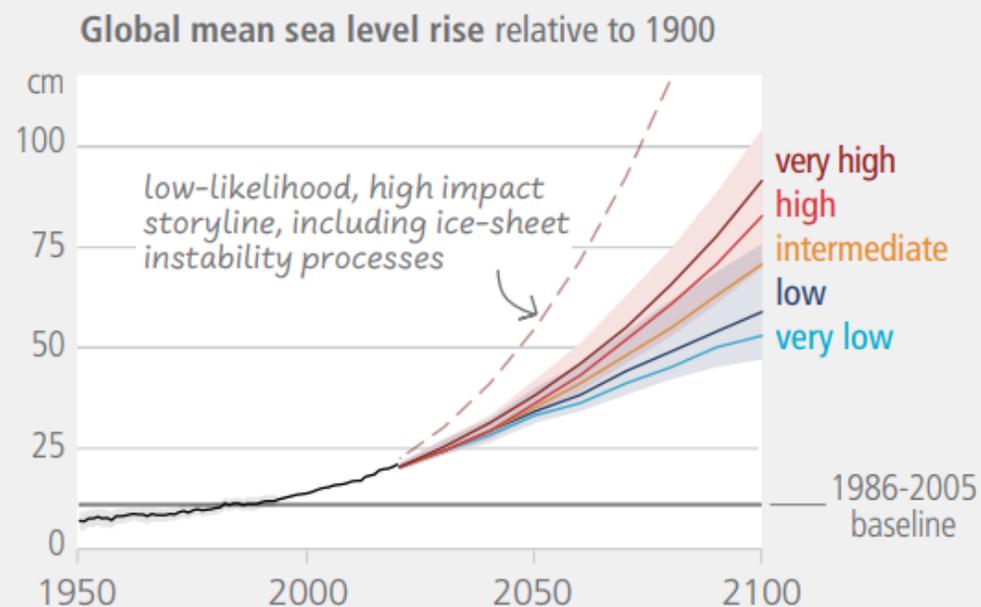
“Deep, rapid and sustained mitigation and accelerated implementation of adaptation actions in this decade would reduce projected losses and damages for humans and ecosystems, and deliver many co-benefits, especially for air quality and health. Delayed mitigation and adaptation action would lock-in high-emissions infrastructure, raise risks of stranded assets and cost-escalation, reduce feasibility, and increase losses and damages. Near-term actions involve high up-front investments and potentially disruptive changes that can be lessened by a range of enabling policies.” IPCC 2023

EU coasts are overexposed

PLACE MATTERS

The **impacts of climate change are place-specific:** while global action is needed, adaptation and preparedness need to be adapted to the different areas

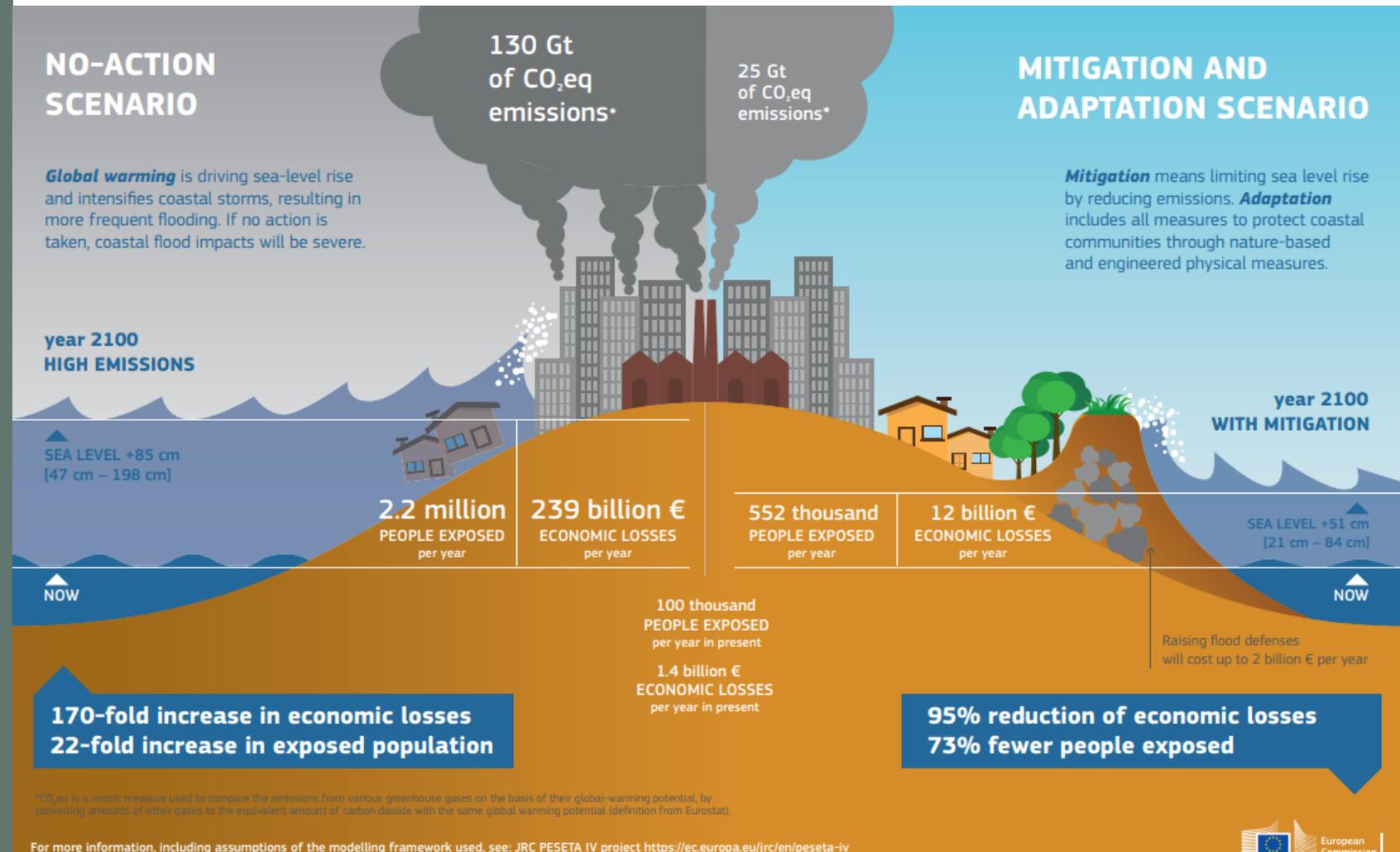
c) Risks to coastal geographies increase with sea level rise and depend on responses



Not only about Planet and future generations

THE COSTS OF NON ACTION

The impacts of climate change have significant impacts in terms of human health and economic losses. The costs of non-action is so high that we cannot afford not to act.



EU Science Hub

JRC PESETA IV

Climate change is one of the biggest threats for humanity, seriously affecting people and nature. The PESETA IV study aims to better understand the effects of climate change on Europe and how these effects could be avoided with mitigation and adaptation policies.

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What is EU doing about climate change?



A TRANSFORMATIVE AGENDA...

These proposals foresee:



greater renewable energy use



the sale of clean new cars and cleaner fuels for cars, planes and ships already on the market



an extension of European carbon pricing to more sectors



targets to save energy



taxation energy sources in line with climate goals



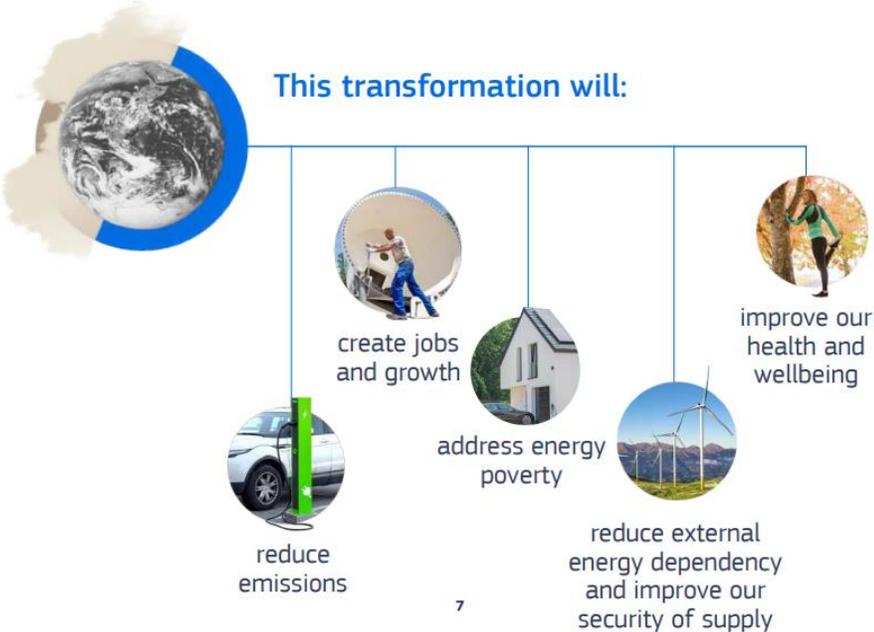
support for vulnerable citizens, to protect them against additional costs during the transition



What is EU doing about climate change?



...WITH AMBITIOUS TARGETS



Beyond legislation: EU-led actions

an example from EU INTERREG programme



SARCC

Sustainable and Resilient Coastal Cities (SARCC)

The overall objective of SARCC is to help **mainstream nature-based solutions (NBS) into coastal management and policy making**, whether that is as stand alone projects or NBS-hybrids, where they are integrated into existing grey infrastructure and flood defences. The project **builds the capacity of urban leaders**, decision-makers and officers involved in coastal flood defences to deploy NBS and understand the additional benefits that they offer in comparison to traditional grey infrastructure. The project aims to **enable the Urban Partners to embed new techniques, methodologies and practices into coastal management** and planning policies and demonstrate the value of NBS and share this knowledge with other coastal urban landscapes across the 2 Seas Programme area. SARCC aims to develop a mechanism to positively engage local communities that are involved in public consultations, highlighting the value/benefits of NBS to coastal communities and supporting the approval process for the investment.

PROJECT INFORMATION

Lead

Southend Borough Council, England, UK

Partners

Marine Archeological Trust, England, UK
Environment Agency, England, UK
Municipality of Blankenberge, Belgium/Flanders
Municipality of Vlissingen, Netherlands
City of Gravelines, France
Exo Environmental Ltd, England, UK
University of Technology Delft, Netherlands
Flemish Government, Belgium/Flanders
Agency for Maritime and Coastal Services, Belgium/Flanders
Town of Middelkerke, Belgium/Flanders
City of Ostend, Belgium/Flanders
HZ University of Applied Sciences, Netherlands
Vives University of applied Sciences, Belgium/Flanders

Beyond legislation: EU-led actions

an example from EU INTERREG programme



SARCC

Main outputs

- A **New Framework and Monitoring Tool** for the **selection of the most suitable nature-based solutions** to deploy along coastal urban landscapes
- Four **Nature-Based Solution Capacity Programme** to engage with urban decision-makers, leaders and officers involved in coastal management

- A **Visualisation Toolkit for local stakeholders** (citizens, businesses) to support the approval of Nature-Based Solutions for Coastal Management
- To deploy a series of **7 Nature-Based Solution Investments**, highlighting added value in comparison to traditional grey infrastructure.
- To **Mainstream Nature-Based Solutions into long-term coastal management strategies** of the Urban Partners

Beyond legislation: EU-led actions

an example from EU INTERREG programme



SARCC

A cross border approach

The SARCC project brings together expertise from urban leaders and knowledge institutions across all 4 Member State in the 2 Seas areas, it brings together experts in urban design, coastal management and policy, climate adaptation, stakeholders engagement and nature-based solutions (NBS), which have experience of different coastal issues or policy approaches. By bringing these experts together it will enable the Partners to co-design and develop solutions that can be deployed by coastal communities across the 2 Seas that want to utilize NBS in their coastal management policies. Partners will establish a Cross-Border Working Group, which is designed to coordinate activities between the urban leaders and knowledge institutions across all partners: this is particularly important for the pilot investments, where Partners will be able to acquire knowledge that will positively impact the results and deliverables across the whole project.

Beyond legislation: EU-led actions

an example from EU LIFE programme



ADAPTA BLUES

Adapta Blues

The LIFE ADAPTA BLUES project focuses on the **restoration of estuarine ecosystems** as a Nature Based Solution to remediate the risks related to climate change in coastal areas. European estuaries have reduced their extension due to land reclamation and the spread of invasive species, among other hazards. The loss of estuaries surface implies the loss of all the benefits these ecosystems have on coastal areas.

The project aims to **demonstrate that the conservation and restoration of estuarine ecosystems is an efficient strategy to enhance adaptation to climate change in coastal areas** of the European Atlantic coast.

PROJECT INFORMATION

Lead

IH Cantabria, Institute for Environmental hydraulics, University of Cantabria, Spain

Partners

Polytechnic of Leiria, Portugal
The Nature Conservancy, TNC Europe
City Council of Figueira da Foz, Portugal

Source of funding

Life Programme

Beyond legislation: EU-led actions

an example from EU LIFE programme



ADAPTA BLUES

Preparatory actions

- Mapping protocol
- Mapping potential migration
- Capacity of Tidal Habitats to path with SLR
- Risk Assessment Protocol
- Economic costs derived from flooding
- Co-benefits of Climate Change mitigation and adaptation
- Flooding Risk Maps

Dissemination actions

- NbS Review of case studies
- Review of casestudies – paper

Implementation actions

- Map of stakeholders
- Review of experiences of oyster restoration
- Scoping Activities Historical Ecology
- Proceedings of NORA Annual Conference
- Report about saltmarsh restoration projects in the Iberian Peninsula
- Methodology for climate change strategies

- High-School Contest
- Online platform description

Beyond legislation: EU-led actions

an example from EU LIFE programme



adapto

Adapto

Adapto explores solutions to the impacts of climate change on the coast, like sea level rise and the increasing frequency of extreme weather events. On 10 pilot sites owned by the Conservatoire du littoral, Adapto experiments with adaptive coastal management. It helps demonstrate the ecological and economic benefit of improving the resilience of coastal areas to protect human activities by opening more space for the coastline. These 10 experimental sites, nine in metropolitan France and one in French Guiana, are typical of five different coastal environments: low and sandy Atlantic coasts, polderised low Atlantic coasts, Mediterranean barrier beaches, Mediterranean salt marshes, mangroves. For each of the 10 sites, the Adapto project helps local authorities, managers and users to build their territory project. To this purpose, Adapto offers them an interdisciplinary approach.

PROJECT INFORMATION

Lead

Conservatoire du Littoral (France)

Partners

Versailles National School for Landscaping, France
National Museum of Natural History, France
National Union of the Permanent Centres of Initiatives for the Environment, France
University of Bretagne Occidentale, France
University of the Littoral Côte d'Opale, France
Ecole Pratique des Hautes Etudes, France
University of la Rochelle, France

Source of funding

Life Programme

Beyond legislation: EU-led actions

an example from EU LIFE programme

adapto

The objectives of the project are:

- To provide a **better understanding of the dynamic nature of the coastline** and the need to adapt to it rather than to hold the line.
- To create **methodological tools** allowing to initiate, **support and assess nature-based adaptation solutions** for coastal areas.
- To **develop knowledge about these solutions** and their acknowledgment at a national and international levels.
- To define the **role of natural environments** in the organization of an effective land-sea interface in relation to adaptation to climate change.
- To allow the state of the art to **progress through concrete actions** on a wide range of geographical contexts representative of the diversity of ecosystems and coastal areas in Europe.



Adapto in numbers

5 269 061 €
Budget

4 years
Duration of the project



10 pilot coastal sites



[Authie Bay](#)

[Orne estuary](#)

[Lancieux Bay](#)

[Moëze Marsh](#)

[Gironde estuary](#)

[Leyre Delta](#)

[Petit and Grand Travers](#)

[Vieux Salins of Hyères](#)

[Golo Delta](#)

[Rice fields of Mana](#)

Beyond legislation: EU-led actions

Horizon Europe: Mission Adaptation



ADAPTATION TO CLIMATE CHANGE



EUROPEAN UNION

EU
MISSIONS

ADAPTATION TO CLIMATE CHANGE

Concrete solutions for our greatest challenges



#EUmissions #HorizonEU #MissionClimateAdaptation

The EU Mission for adaptation to Climate Change

The Mission on Adaptation to Climate Change focuses on supporting EU regions, cities and local authorities in their efforts to build resilience against the impacts of climate change.

The Mission contributes to putting the [EU's adaptation strategy](#) in practice by helping the regions to

- better **understand the climate risks** they are and will be confronted with in the future
- develop their **pathways** to be better prepared and cope with the changing climate
- test and **deploy on the ground innovative solutions** needed to build resilience

The Mission's objective is to accompany by 2030 at least 150 European regions and communities towards climate resilience, also through a [dedicated portal](#). (from: [Adaptation to climate change \(europa.eu\)](#))

MISSION & CHARTER OBJECTIVES

- Support at least 150 European **regions and local authorities** towards **climate resilience** by 2030
- Build a **community of practice on adaptation to climate change**
- Support delivering the **European Green Deal** and the **Climate Adaptation Strategy**

BENEFITS FOR SIGNATORIES

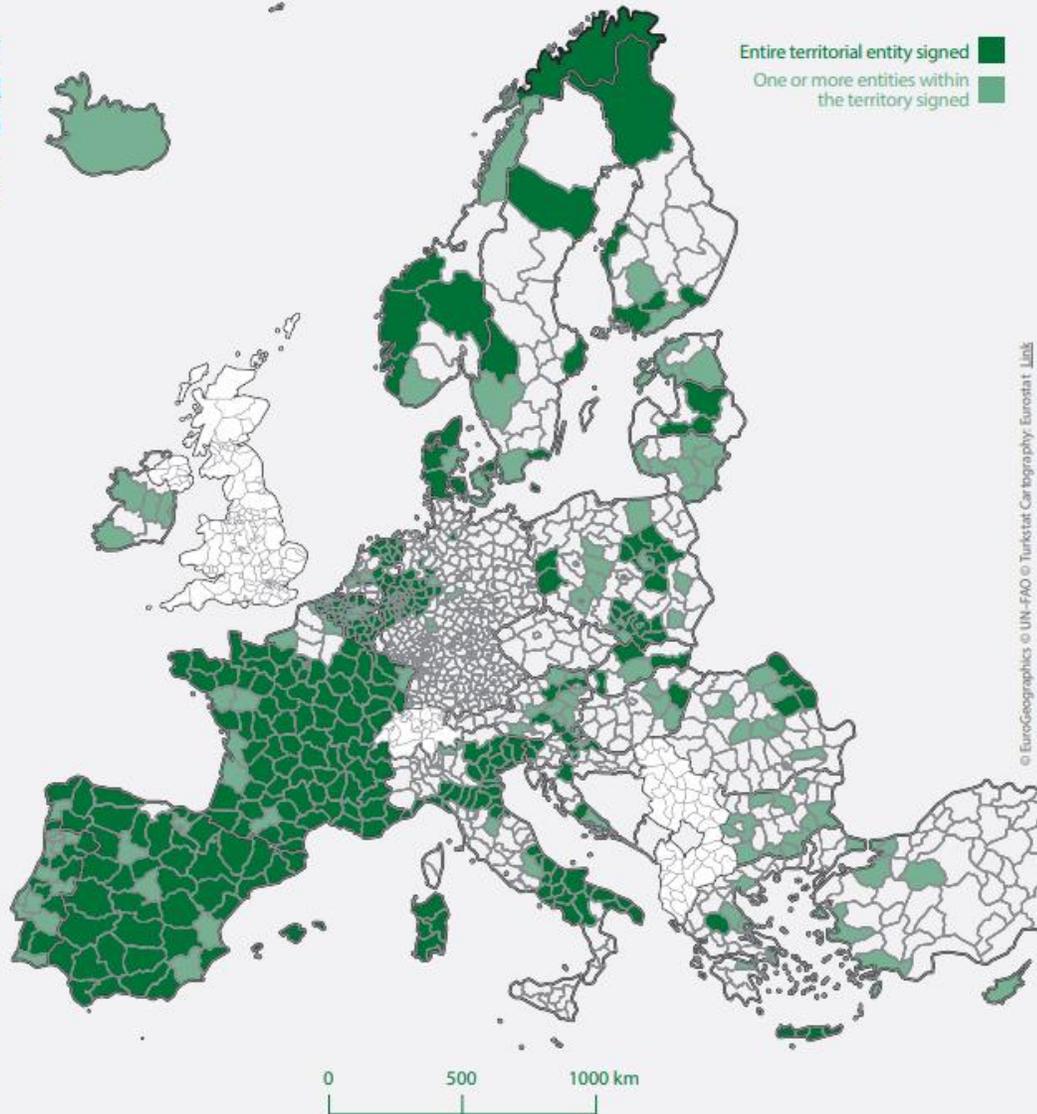
- **Advice and guidance** from the Mission Implementation Platform MIP4Adapt
- **Research & innovation funding opportunities** to join large innovation actions, pilot projects and demonstrations (budget from Horizon Europe for 2023-2024: €138 million)
- Support through the **community of practice on adaptation to climate change**
- Help by acting as **testbeds for innovative adaptation solutions**
- Networking opportunities, **learning and exchange of experiences** among regions, local authorities and communities
- Support with **involving citizens in decision-making**
- Participation in the annual **Mission Forum**
- **Visibility** for participating regions and local authorities

Beyond legislation: EU-led actions

Horizon Europe: Mission Adaptation

MAP OF EUROPEAN CHARTER SIGNATORIES

EU Mission on Adaptation
to Climate Change



MEET THE REGIONS AND LOCAL AUTHORITIES

10 May 2023

308 CHARTER SIGNATORIES

- 291 EU regions and local authorities, from 25 EU Member States
- 17 regions and local authorities from countries associated to Horizon Europe, the EU's research and innovation programme (2021-2027)



Large regions



Cities



Provinces



Municipalities



Capitals

FRIENDS OF THE MISSION

- 63 private companies, service centres, research networks, and local action groups endorse the Charter and become friends of the Mission

Beyond legislation: EU-led actions

Horizon Europe: Mission Adaptation



Mission's projects

Project name	Description	Website
REGILIENCE	The Regilience project aims to identify and upscale the most promising climate change resilience solutions and will support their replication in 10 vulnerable regions in Europe. It will communicate about them through channels such as events and training; provide tools and guidance; and inspire policymakers, organisations, and individuals to become part of the change.	https://regilience.eu/
TransformAr	TransformAr aims to upscale and accelerate transformational adaptation to reduce climate-related risk. It addresses water-related risks and impacts of climate change through six demonstrator regions and communities that will test solutions.	https://transformar.eu/
IMPETUS	IMPETUS aims to develop and validate a coherent, multi-scale, multi-level, cross-sectoral climate change adaptation framework spanning all 7 EU biogeographical regions. It will build a robust stakeholder community with reliable data and assessment methods to support decision and policymaking, empowering communities to take action on climate change adaptation. It will also implement and validate specific measures to adapt to climate change.	https://climate-impetus.eu/
ARSINOE	ARSINOE develops actionable solutions and fosters an innovation ecosystem to further climate resilience and enable adaptation to climate change across Europe. It connects innovators and end-users in different European regions to create novel innovation packages, business models, and implementation concepts that promote sustainability and growth through European cross fertilisation. It develops and tests demonstrators for applicability, reproducibility, potential, and effectiveness in nine diverse European regions.	https://arsinoe-project.eu/

CLIMAAX	The CLIMAAX project aims to accelerate the design and implementation of risk management plans for climate adaptation and emergency response across Europe. It will provide substantial financial, analytical and practical support to regions and communities to develop and improve their climate risk assessments through a number of activities including a standardised climate risk assessment framework, a toolbox with data, models and utilities linking global open data archives with local data and procedures, five European pilots, financial support to execute a context-specific climate risk assessment, online guidance on climate risk assessment and a proposal to upscale results.	https://cordis.europa.eu/project/id/101093864
R4C	The Regions4Climate project aims to collaboratively develop and demonstrate a socially-just transition to climate resilience. The project will create and implement innovations combining sociocultural, technological, digital, business, governance, and environmental solutions to reduce the vulnerability of European regions to the impacts of climate change. It will develop a comprehensive Adaptation Framework including a Regional Climate Resilience Dashboard for each partner region, and will design, deploy and scale up solutions through a twinning approach, including 12 demonstration cases across Europe.	https://cordis.europa.eu/project/id/101093873
Pathways2Resilience / PEERS	P2R takes an innovative, systemic approach to regional climate resilience. It will empower at least 100 regions and communities to co-design visions of a climate resilient future and transformative, locally led pathways and innovation agendas to ensure long-term impact through political commitment. The P2R consortium brings the combined strength of building specialists and monitoring and innovation impact partners	https://pathways2resilience.eu/
RESIST	The RESIST project will test adaptation solutions to five key climate challenges: floods, droughts, heatwaves, wildfires, and soil erosion, in four demonstrator regions and eight twinning regions across Europe. RESIST involves stakeholder collaboration in designing and testing more than one hundred new and innovative solutions – adaptation products, regulations, policies and methods. RESIST will also develop 12 Graphical Digital Twins through immersive technologies, to support decision-making.	https://resist-project.eu/



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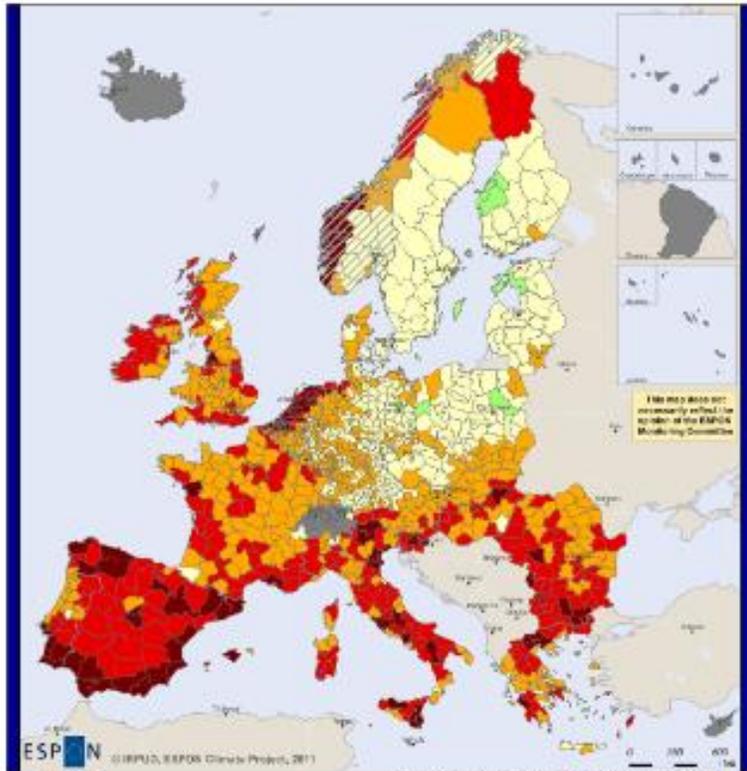
FROM PILOT PROJECTS TO SYSTEMIC CHANGE

Why best practices are not enough?

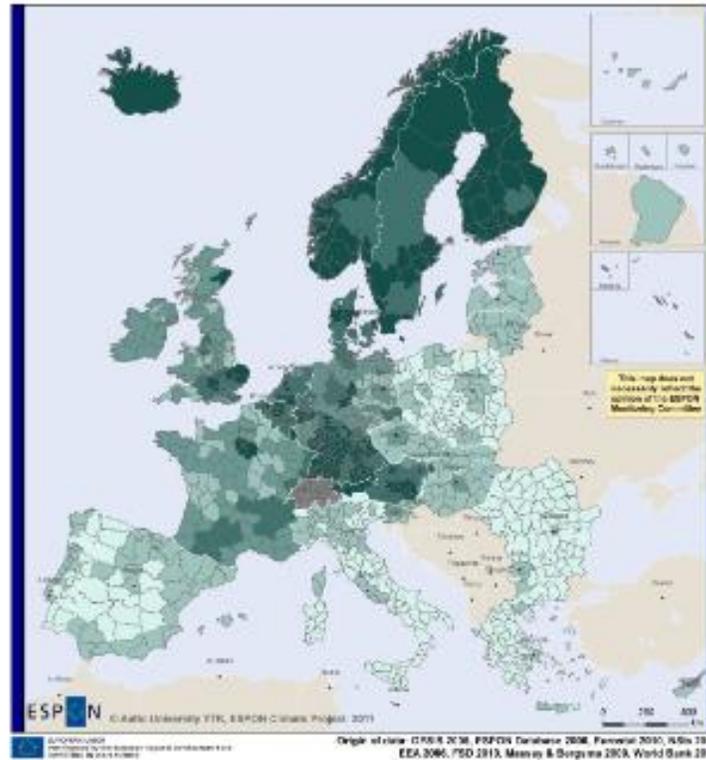
Best practices are not enough

EU-WIDE ACTION NEEDED

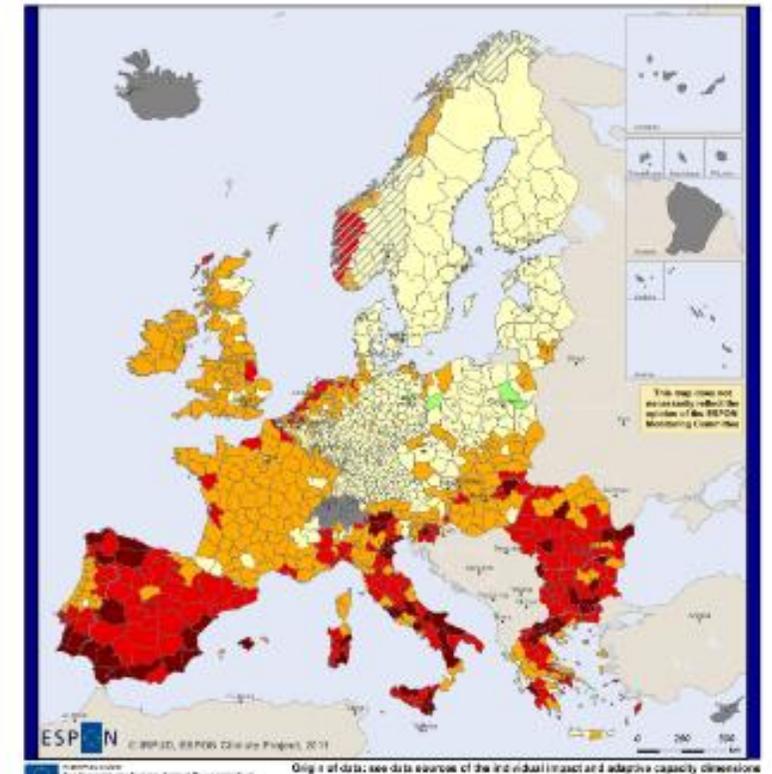
The **impacts of climate change are widespread: urgent action is needed all over the EU**, including areas which struggle the most in getting EU funding.



Aggregate potential impact of climate change



Overall capacity to adapt to climate change



Potential vulnerability to climate change

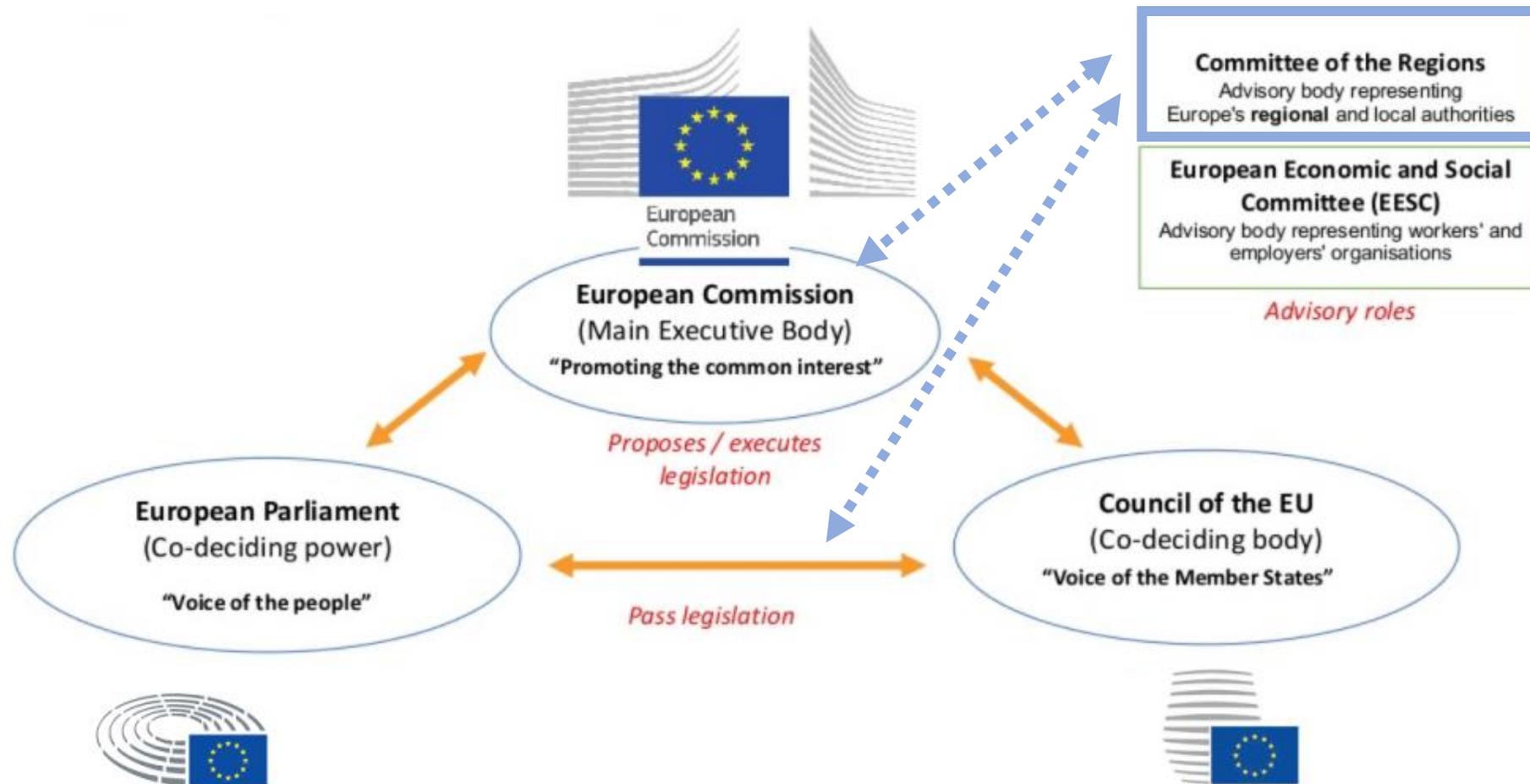
Cities and regions matter

Widespread and effective climate action can only happen in cities and regions, where impacts are felt and specificities of each territory well known.



- Immediate response to climate disasters is provided by local and regional authorities.
- Climate change policies need to be tailor-made to local needs and specificities.
- Impacts of climate changes are felt in cities and towns.
- Climate action requires citizens on board: this can only happen at local scale.

Bringing cities and regions in EU decision-making to make systemic change happen

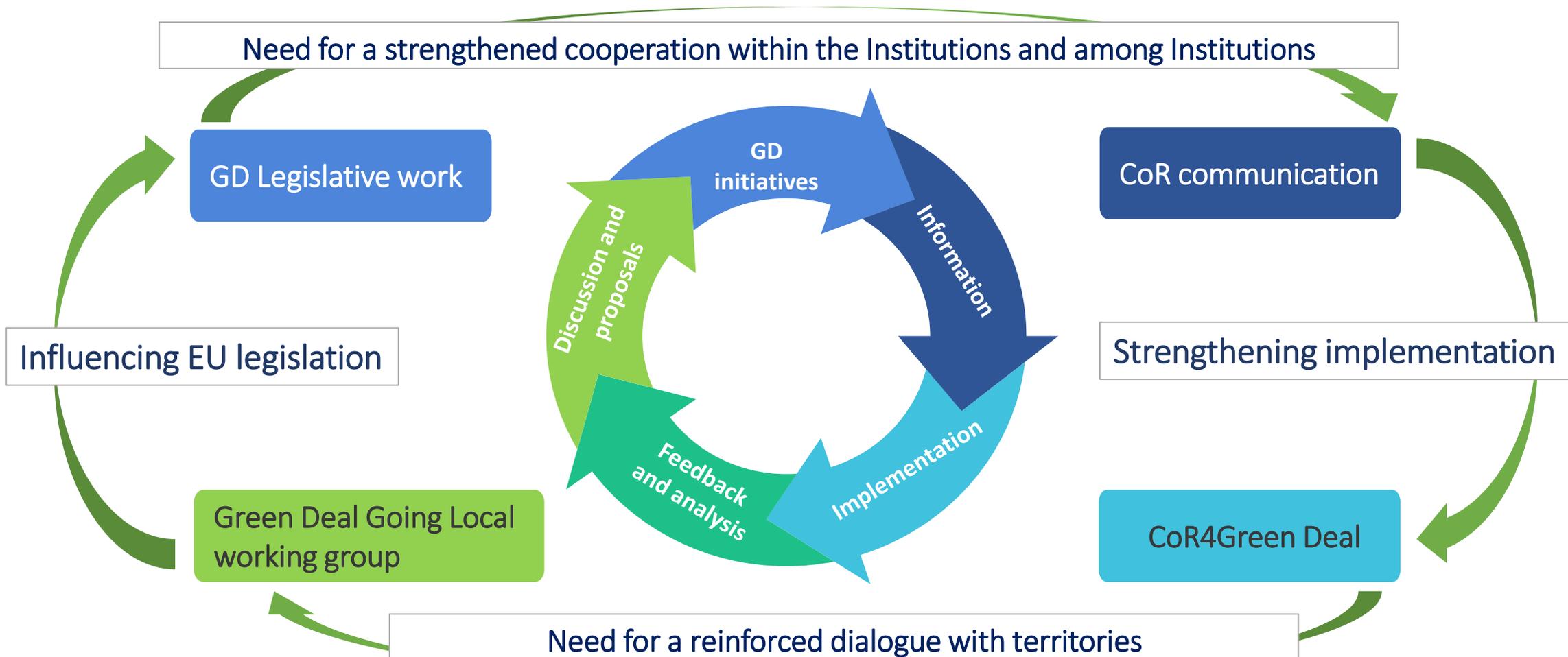


MAKE LRAs MATTER

The European Committee of the Regions (CoR) delivers to co-legislators opinions on the needs and request of cities and regions regarding EU initiatives and legislation. This role is crucial to ensure that all EU legislation is fit for local implementation and enables the needed systemic change.

Closing the gap with Brussels

to empower cities and regions through their politicians



CoR views on Green Deal

The CoR is working to formalise the position of EU cities and regions on the European Green Deal through its legislative work. The CoR believes that:

- The **European Green Deal is a much-needed policy**, which needs to be supported to ensure a liveable planet for all.
- The urgency of climate change puts **cities and regions at the centre**, as key partners to deliver timely on the actions, with easier access to funds.
- Implementation needs to be better planned and supported: the **EU is still falling short in establishing correct and inclusive implementation strategies**.
- Green Deal needs to be **mainstreamed in EU economic governance**

Since 2020, the CoR has:

- Released 80+ opinions on the European Green Deal, several resolutions and studies.
- Established the **Green Deal Going Local working group** and a dedicated communication campaign.
- Launched a systematic **collection of GD best practices** and a mapping of subnational climate commitments.
- Released the Green Deal Going Local **handbook** and the periodical issues of the CoR Green Deal Funding Alert.
- Activated the networks of CoR **Ambassadors** for Covenant of Mayors and Climate Pact.

CoR views on Green Deal

- **Social protection** needs to be strengthened to ensure an inclusive green transition.
- Green transition poses different issues and opportunities to the EU territories:
implementation need to be fine-tuned, avoiding one-size-fits-all approach and the transition needs to be monitored at subnational level.
- The European Green Deal has created an **avalanche of legislation and procedures that need to be streamlined and harmonised** in a more consistent and comprehensive governance structure, to be better linked with SDGs framework.
- **Adaptation policies require new funding mechanisms.**

Some highlights from our recent **opinions**

- Fostering the potential and synergies of EU Green Deal initiatives for regions and cities
- Reform of the EU electricity market design
- EU Nature Restoration Law
- Towards a structural inclusion of Cities and Regions in UNFCCC COP27

(See more at: <https://cor.europa.eu/en/our-work/commissions/Pages/enve.aspx#Opinions>)

Some highlights from our recent **studies**:

- The impact of EU climate and energy initiatives on cities climate transition
- Climate adaptation: Measuring performance, defining targets and ensuring sustainability
- European Green Deal Handbook

(See more at: <https://cor.europa.eu/en/our-work/commissions/Pages/enve.aspx#Studies>)

EU Green Deal: What's next?

In view of the European elections in 2024 and of the renewal of the EU mandate, **the CoR has launched a reflection on the future of the European Green Deal**, thinking of how a Green Deal 2.0 should look like in order to better serve the needs of cities and regions.

This work is composed of several components:

- **Legislative work:** by preparing a set of forward-looking opinions and organizing a dedicated foresight exercise.
- **Evidence based policies,** by releasing a series of studies and questionnaires.
- **Political debate and communication,** by organising dedicated discussions at political level and dedicated communication actions.

HAVE YOUR SAY ON OUR ONGOING WORK

- **Towards a multilevel Green Deal governance: the revision of the Governance of the Energy Union and Climate Action Regulation**
- **European Hydrogen Bank**
- **UNFCCC COP28: the role of subnational authorities in keeping climate ambition on track**
- **Green Deal and Health**
- **EU soils strategy**
- **Green Deal 2.0**
-

By contacting us at enve@cor.europa.eu



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THANK YOU!

GRAZIE!



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Green Deal Going Local