Adapting Together

A territorial approach to resilience and risk management

Key messages

Europe is the fastest-warming continent, with climate impacts increasingly affecting communities, infrastructure and ecosystems. Heatwaves, droughts and floods are occurring more frequently and unevenly across territories, deepening vulnerabilities and putting pressure on local public services.

Local and regional governments are at the forefront of these challenges: they implement most adaptation measures, protect vulnerable groups, and ensure the continuity of essential services. Yet their capacity to act is constrained by limited resources, data gaps and insufficient recognition in national and EU frameworks. To embed a territorial approach to resilience across the Union, the EU must therefore strengthen their role and capacity.

This contribution to the forthcoming Integrated Framework on European Climate Resilience and Risk Management highlights how empowering local and regional governments can overcome these barriers and strengthen Europe's overall preparedness.

In view of this, CEMR calls on the EU to:

1. **Empower local and regional leaders:** Establish a shared climate trajectory across all levels of governance, giving local and regional authorities the mandate and flexibility to act.
2. **Build local capacity:** Expand access to data, guidance and peer-learning, and support municipalities in planning and delivering adaptation solutions.
3. **Secure adaptation funding:** Simplify EU funding access, channel ETS revenues to the local level, and encourage innovative financing such as green bonds and pooled investments.
4. **Improve preparedness and response:** Include local authorities in the Union Civil Protection Mechanism and ensure sustained resources for prevention, emergency management and recovery.
5. **Restore ecosystems locally:** Support municipal implementation of nature restoration measures, nature-based solutions and soil protection.
6. **Ensure water resilience:** Advance locally driven water-saving strategies, circular water management and integrated watershed planning.

Europe is the fastest warming continent in the world, with temperatures rising at twice the global average. According to recent studies, the European Union could face annual losses of at least €42 billion under current trends, rising to €175 billion under a 3°C warming scenario[1].

This underlines the urgent need to step up climate adaptation, defined by the IPCC as "*the process of adjustment to actual or expected climate and its effects*." While reducing greenhouse gas emissions remains essential, many climate impacts are now unavoidable even under the most aggressive emissions reduction pathways. Such impacts manifest very differently across territories, even within a single Member States.

These place-specific impacts underline the critical role of local and regional governments in translating EU and national adaptation policies into concrete measures tailored to their territories. LRGs are already responsible for implementing 90% of all adaptation measures, drawing on territorial expertise and community proximity to develop context-specific responses to specific climate risks[2].

Their proximity to citizens also enables them to respond directly to the needs of vulnerable groups, who are often disproportionately affected by climate change. A strong example comes from Antwerp, where the city launched the Heat Stress Adaptation Antwerp project, using thermal mapping to identify health risks and target interventions for the most at-risk populations[3].

Climate impacts also have a strong social dimension. Vulnerable populations, including low-income households, elderly people, and residents of densely built neighbourhoods, are disproportionately exposed to heat stress, flooding, and infrastructure disruptions. Yet, the ability of individuals and communities to cope with climate shocks — their social resilience — remains insufficiently addressed in current adaptation policies. Research by the Dutch Scientific Council for Government Policy underlines that investing in social infrastructure is vital to support community resilience, by strengthening local networks, social services, and accessible information sharing[4]. Local and regional governments are best placed to identify vulnerable groups and design targeted measures, but they require political recognition and dedicated support to fully assume this role.

Nonetheless, scaling up these efforts and unlocking the full potential of local and regional governments depends on creating an adequate enabling environment at European and national level. This requires putting forward horizontal measures to stronger multilevel governance, sustained

[1] Feyen, L., Ciscar, J.C., Gosling, S., Ibarreta, D. & Soria, A. (eds) 2020. *Climate change impacts and adaptation in Europe. JRC PESETA IV final report*. EUR 30180 EN. Luxembourg: Publications Office of the European Union. doi:10.2760/171121.
[2] Council of European Municipalities and Regions (CEMR). 2024. *Local Green Transition: Prospects for an Inclusive and Competitive Deal* (p. 5).
[3] European Environment Agency (EEA). "Adapting to heat stress in Antwerp (Belgium) based on detailed thermal mapping." Climate-ADAPT Case Study, 7 April 2020.
[4] Dutch Scientific Council for Government Policy (WRR). *People and Climate: How Social Infrastructure Powers Adaptation*. (2025).

investment in capacity-building and improved access to funding complemented by sector-specific guidance on disaster preparedness, healthy ecosystems, and water resilience.

Horizontal enablers

Building climate resilience depends on a strong enabling environment that allows local and regional governments to plan, finance, and deliver adaptation measures effectively. These horizontal enablers form the foundation for successful implementation at territorial level. They include clear and coordinated governance frameworks, accessible data and technical capacity, and stable financial mechanisms that match the scale of local adaptation needs. Strengthening these cross-cutting conditions is therefore essential to unlock the full potential of cities and regions.

1. Strengthen Multilevel Governance to Boost Climate Resilience

Europe's territories are facing increasingly complex and uneven climate impacts that threaten public health, ecosystems and infrastructure. Such impacts manifest very differently across territories, even within a single Member States. Italy illustrates this dynamic vividly, with the South facing increasing drought and wildfire risks while the North struggles with recurrent flooding[5].

These challenges are inherently local in nature, yet their management requires coordinated responses that transcend administrative and sectoral boundaries, linking place-based necessities with broader climate objectives. Against this backdrop, local governments are already responsible for implementing 90% adaptation measures, translating EU and national adaptation policies into concrete solutions tailored to specific territorial needs. Hence, linking local needs with climate adaptation policies requires stronger multilevel governance frameworks that support the co-creation of policies with all levels of government and provide full backing for implementation on the ground.

To provide a shared basis for planning, the European Union should adopt a common climate warming trajectory, providing stakeholders with a single reference for anticipating climate risks, designing resilient infrastructure, and assessing future vulnerabilities across territories. Such a framework would in turn support more coherent adaptation planning, better investment decisions, and improved risk management across all levels of governance.

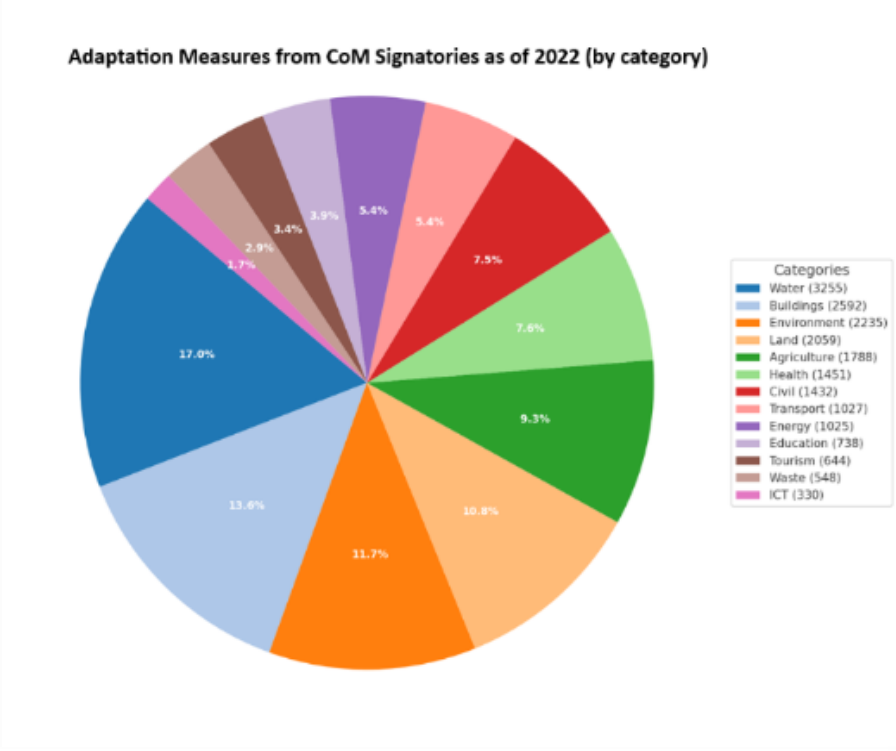
National governments must complement overarching adaptation strategies with clear guidance for local and regional authorities, providing municipalities and regions with the tools, data, and

[5] Legambiente. (2021). "Città Clima – Bilancio finale 2024" (p. 3)

regulatory clarity they need to turn national plans into concrete territorial action. At the same time, this guidance should not become overly prescriptive, as local authorities need sufficient flexibility to tailor measures to their place-specific context. Strengthening multilevel governance therefore requires more than coordination: national authorities set strategic orientations, while subnational actors design and implement solutions that respond effectively to local realities.

Strengthening multilevel governance also involves ensuring consistency with other relevant pieces of EU sectoral legislation such as the Water Resilience Strategy and the Nature Restoration Regulation, while ensuring coherence with mitigation policies related to the Clean Industrial Deal. Moreover, enhancing multilevel governance also requires building on existing EU initiatives that engage local governments in climate adaptation, notably the Covenant of Mayors, in which CEMR holds a formal role as a Supporter since its inception, providing practical guidance to local governments adhering to the initiative on how to implement their climate commitments.

Since the inclusion of an adaptation dimension in the Covenant's framework, nearly 20,000 adaptation measures have been reported by signatories according to the EEA, pioneering innovative approaches to climate resilience across multiple sectors[6]. Therefore, aligning national and EU policies with existing local initiatives is a crucial strategy to tap into this unique expertise.



Source: European Environment Agency. Urban adaptation in Europe: what works?, 2023

[6] European Environment Agency. *Urban adaptation in Europe: what works?* EEA Report 14/2023. Luxembourg: Publications Office of the European Union, 29 April 2024.

2. Develop Territorial Capacity to Meet Climate Challenges

Local governments need the capacity and resources to translate climate adaptation strategies into concrete territorial measures. Notably, effective spatial planning based on high-quality data is essential to balance considerations related to land use, climate resilience, and biodiversity protection. However, EU and national datasets are often too general to effectively guide local land-use decisions. National governments should therefore ensure that local and regional authorities have access to data with sufficient spatial resolution, including detailed maps of flood, landslide, and erosion risks, as well as clear guidance and practical tools to help integrate climate risk assessments into spatial planning processes.

The EU already provides valuable instruments such as the Climate-ADAPT portal and the Copernicus programme, but most local government are not yet aware of these resources, according to the Court of Auditors. Enhancing their visibility and usability, including through comprehensive translations, is therefore crucial. In parallel, twinning schemes that establish peer-to-peer partnerships between municipalities facing comparable climate challenges should be expanded to accelerate knowledge transfer on local best practices.

In Norway, the Norwegian Association of Local and Regional Authorities (KS) is co-leading a pilot project, together with municipalities, national agencies and academia, to develop an *Area and nature account tool*, for municipalities to integrate ecosystem data into land-use planning and assess environmental and climate impacts of development at the planning stage[7]. As this currently remains a pilot, it underlines that equipping municipalities with such tools requires careful assessment and strong national–local partnerships, supported by sustained investment.

Yet even with stronger technical skills, better data and improved planning tools, many municipalities still lack the administrative and human capacity required to access and manage adaptation finance. Complex application procedures, limited staff time and fragmented guidance often prevent local authorities from turning well-designed plans into funded projects. Strengthening local capacity must therefore go hand in hand with improving access to finance. This makes it essential to complement technical support with financial enablers that allow municipalities to deliver adaptation measures at the scale required.

CEMR views on EU Mission on Adaptation to Climate Change: The EU Mission on Adaptation to Climate Change has proven to be a valuable instrument for mobilising local and regional authorities, fostering knowledge exchange, and strengthening cooperation across Europe. National adaptation networks illustrate how the Mission can be translated into practical collaboration between municipalities, regions, research institutions, and businesses to advance climate resilience.

[7] KS. "Breitt samarbeid for å utvikle areal- og naturrekneskap." 7 October 2024

However, the Mission's impact could be further enhanced through a stronger focus on implementation challenges and investment needs, ensuring that local authorities receive the necessary financial and technical support to translate strategies into concrete measures. Better alignment of timelines between EU, national, and local initiatives would also help maximise synergies and avoid duplication of efforts.

3. Mobilise Public and Private Finance for Local Adaptation Measures

Access to financing represents the critical barrier to scaling up local adaptation action. In nearly all European states, local government deficits are growing, increasing pressure on investments. The German municipal associations expect a deficit of more than 30 billion Euro in 2025, with investment cuts already limiting available funding for climate adaptation. To address this, national governments should provide adequate financial support for local adaptation initiatives.

Adapting urban infrastructure to climate change requires significant investment. Municipalities need support to make energy, water, heating and transport networks more resilient, including strengthening electricity grids to meet rising demand from electrification, improving water storage and efficiency during droughts, and reinforcing sustainable public transport.

Investment in the renovation and insulation of private housing and municipal buildings is also critical for adaptation. Beyond mitigation benefits, renovation improves thermal comfort and reduces heat vulnerability in dense urban areas, but its high upfront costs remain a major challenge for local authorities.

Due to widening gap between available resources and implementation capacity at the local level, the EU should also increase financial support for critical adaptation policies by earmarking a share of future funding programmes for resilient territorial investments as part of the ongoing negotiations for the next EU budget[8]. The EU Emissions Trading System (ETS) can also represent another crucial source of funding, by dedicating a portion of revenues to subnational adaptation measures to strengthen the capacity of local authorities to protect communities through the implementation of place-specific adaptation measures.

Public funding alone will not be sufficient to meet the full scale of financing needs, making private investment a vital component that can only leveraged through innovative risk-sharing mechanisms and co-financing arrangements. Local and regional governments should be allowed to mobilise financing from public and private property owners who are directly affected by climate risks. While the main responsibility for protecting buildings and land lies with property owners, many adaptation

[8] Council of European Municipalities and Regions (CEMR). *A reformed EU budget in partnership with Local and Regional Governments – Proposal MFF post-2027: CEMR Position Paper 2025.* Brussels: CEMR, February 2025

measures require coordinated solutions that benefit whole communities, such as flood defences or stormwater systems. Therefore, such mechanisms could be extremely beneficial for developing the necessary infrastructure to increase territorial resilience to extreme weather events.

Nature credits: potential and cautions. While nature credits can mobilise private financing for restoration, they must complement—never replace—public responsibility for coordinating environmental protection. CEMR calls for EU-level safeguards to ensure transparency, additionality, and fair benefit-sharing with local communities, preventing market-based tools from undermining the public value of nature.

Innovative financial mechanisms allowing local authorities to access investment capital at lower interests should also be further encouraged. While such mechanisms already exist in several European countries, the most long-running example is Sweden's Kommuninvest[9], a jointly owned financial institution enabling regions and municipalities to borrow jointly through common guarantees, also issuing large-scale green bonds, offering favourable financing conditions for local climate and environmental projects. Yet, additional support is needed to expand the use of such instruments, particularly in smaller municipalities and regions where financial constraints are more acute, while also providing support to ensure liquidity as such loans need to be eventually repaid.

Figure 2: Key barriers for LRAs in accessing public adaptation funding

Source: Adaptation financing mechanisms for action at the local and regional levels, European Committee of the Regions, 2024[10]

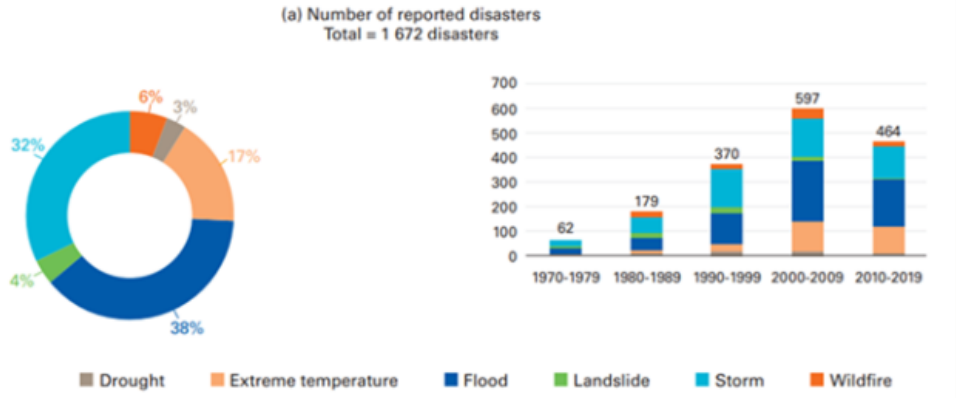
[9] https://kommuninvest.se/eng/homepage.4.35de2c7b1900fda7e624f57.html
[10] European Committee of the Regions, *Adaptation financing mechanisms for action at the local and regional levels*, European Committee of the Regions, 2024

Sectoral recommendations

Strengthening these horizontal enablers will only be effective if they are accompanied by targeted actions in key sectors where local and regional authorities hold decisive competences. The next section therefore sets out sectoral recommendations focusing on preparedness, ecosystems, and water resilience.

4. Boost Local Preparedness to Safeguard Communities and Territories

According to the World Meteorological Organization, Europe experienced 1,672 disasters between 1970 and 2019, resulting in 159,438 deaths and economic losses amounting to US$ 476.5 billion[11]. With extreme weather events becoming more frequent, intense, and unpredictable, these already substantial figures are projected to rise sharply, highlighting the urgent imperative for enhancing readiness in the face of growing risks.



Source: World Meteorological Organization. Atlas of Mortality and Economic Losses from Weather, Climate and Water Extremes (1970–2019), 2021

Local and regional governments have a key role to play in increasing the EU's resilience vis-a-vis climate disasters. Beyond coordinating the initial response, and in some cases the prevention local authorities ensure the continuity of critical public services such as transport, water, and energy. Nonetheless, in spite of their crucial role, local governments often remain underrepresented in

[11] World Meteorological Organization. *Atlas of Mortality and Economic Losses from Weather, Climate and Water Extremes (1970–2019)*. Geneva: WMO, 2021

national adaptation strategies and EU-level policy frameworks. Consequently, strengthening coordination mechanisms and the involvement of local authorities in crisis management is vital to mitigate the impact of disasters.

Cross-border and horizontal cooperation is equally important, as climate risks transcend administrative boundaries. Hence the importance of improving coordination among all levels of government through joint contingency plans and systematic exchange of best practices. EU initiatives aimed at local governments such as the Covenant of Mayors and the Mission on Adaptation offer powerful frameworks for such cooperation, but their potential remains constrained by limited mandates and insufficient financial resources.

According to the European Central Bank, only a quarter of climate-related catastrophe losses are currently insured[12]. This coverage gap is expected to further widen as rising premiums increasingly put insurance out of reach for many municipalities across Europe, depriving them of a vital financial resource for disaster recovery as rising premiums make coverage increasingly unaffordable for many municipalities.

Strengthening the capacity of critical infrastructure to withstand climate-related disruption is crucial to guarantee the provision of essential services, which is essential to protect communities and maintain social stability. The EU should thus support municipalities and regions in assessing climate risks to public services and investing in infrastructure upgrades, contingency planning, and digital tools that enhance service continuity.

As part of the new Multiannual Financial Framework, the revised Union Civil Protection Mechanism (UCPM) offers another crucial opportunity to strengthen Europe's resilience to climate-related disasters, foreseeing €11 billion to improve early warning systems and risk assessments for 2028–2034. Nonetheless, the UCPM must become a genuine multilevel instrument to deliver tangible results on the ground. This means actively involving local and regional governments in shaping strategies, while also providing them with the resources to ensure their full implementation.

To strengthen Europe's climate resilience, it is thus essential to position local governments as strategic partners in disaster preparedness and response. Achieving this will require integrated governance structures, long-term investment strategies, and innovative financial partnerships that together provide the flexibility and stability municipalities need to safeguard their communities in the face of increasingly complex climate risks.

[12] European Central Bank & European Insurance and Occupational Pensions Authority. *Policy options to reduce the climate insurance protection gap – Discussion Paper*. April 2023

5. Healthy Ecosystems: Strengthening Nature-Based Resilience Across Territories

Across Europe and globally, ecosystems are under increasing pressure. According to the European Environment Agency, more than 80% of Europe's natural habitats are in poor conservation status, while the World Economic Forum ranks biodiversity loss among the top five global risks to society. Healthy ecosystems are fundamental to adaptation: wetlands absorb floodwaters, forests stabilise soils and regulate temperatures, and coastal ecosystems buffer against erosion and storms. In urban areas, expanding green and permeable infrastructures and deploying nature-based solutions is also essential to reduce urban heat islands, manage surface water and enhance resilience to climate extremes. Yet, ecosystem degradation has reduced nature's capacity to provide these essential services, making climate impacts more severe and costly. Investing in nature restoration could deliver up to €38 in economic benefits for every euro spent, highlighting the critical role of healthy ecosystems in Europe's adaptation strategy and the Green Deal.

Local and regional governments are key to translating EU nature goals into local action as they shape how land and ecosystem's function. Their proximity to citizens allows for integrated, place-based approaches, but they face barriers: fragmented governance, limited expertise, and unstable funding. Empowering local and regional authorities to lead ecosystem restoration is therefore essential to achieving EU targets under the Nature Restoration Law and to delivering tangible resilience benefits for citizens.

Nature legislation and nature-based solutions: from ambition to implementation

While the Nature Restoration Regulation and EU Biodiversity Strategy have set ambitious goals, implementation at local level remains challenging. Many municipalities struggle to mainstream nature-based solutions (NbS) into urban and regional planning due to complex permitting procedures, limited technical guidance, and a lack of stable funding. Furthermore, long-term maintenance costs often fall outside project budgets, undermining the sustainability of restoration efforts.

To ensure effective implementation, national priorities must be clearly defined, and sufficient regulatory flexibility should be granted to local and regional authorities. This would enable them to design and adapt balanced solutions that both lead ecosystem restoration and support local economic and social development.

CEMR therefore calls on the European Commission and Member States to:

- Provide clear guidance and technical support for local implementation of the NRR, including coordination mechanisms between national, regional, and local levels;

- Secure predictable funding for the full lifecycle of NbS — from design to maintenance — through EU cohesion policy, LIFE, and other programmes;
- Promote cross-border and inter-municipal cooperation to strengthen blue-green connectivity and deliver restoration objectives at landscape scale.

Healthy soils as the foundation of ecosystem resilience

Soil degradation affects 60–70% of European soils, driven by urbanisation, intensive agriculture, and pollution. Healthy soils underpin ecosystem functioning, water regulation, and food security — yet their protection remains fragmented across policy areas. Local and regional governments face increasing land-use conflicts as they balance renewable energy deployment, housing, and agricultural needs.

In the Brussels-Capital Region, initiatives such as the *ArchiSols* project and the *Good Soil Strategy*, show how improved soil knowledge can support local climate adaptation[13]. By integrating soil data into spatial planning and urban development, local authorities can reduce flood risks, limit soil sealing and strengthen nature-based solutions.

To address this, CEMR urges the EU to support municipalities and regions in implementing the forthcoming Soil Monitoring Law by:

- Providing capacity-building and technical tools for integrating soil health indicators into spatial and agricultural planning;
- Encouraging land recycling and limiting soil sealing through incentives in EU and national funding frameworks;
- Promoting knowledge exchange among local authorities on effective soil restoration and management practices.

By placing ecosystems — from soils to forests to wetlands — at the centre of adaptation policies, Europe can build resilient, inclusive, and sustainable territories capable of withstanding future climate shocks

6. Water Resilience: Safeguarding Europe's Most Vital Resource

Recent crises, from summer droughts in Southern Europe to urban flooding in Central Europe, show that water management must be a cornerstone of Europe's climate adaptation agenda. Droughts, floods, and aging water infrastructure increasingly threaten communities, ecosystems, and local

[13] Brulocalis, Trait d'Union n° 143 p. 14, mai-juin 2025

economies. The European Commission's *Water Resilience Strategy adopted in* 2024 rightly identifies local and regional authorities as central actors in achieving sustainable water management - ensuring safe water supply, flood prevention, and sustainable water use. However, the strategy's success will depend on effective coordination, predictable funding, and support for locally driven solutions that bridge urban and rural systems[14].

CEMR, as part of the **Urban Agenda Partnership on Water Sensitive Cities**, supports local and regional governments in creating and implementing policies and tools that promote sustainable water management in urban areas such as green-blue infrastructure, sustainable drainage systems, and climate-adaptive urban planning. This engagement demonstrates the added value of multi-level cooperation in achieving the EU's resilience objectives.

[14] Council of European Municipalities and Regions (CEMR), "EU Water Resilience Strategy: Enhancing sustainability and adaptation through effective governance and cooperation with municipalities and regions", 31 January 2025

Local Leadership in a Global Adaptation Effort

Local and regional governments are at the frontline of Europe's adaptation effort. CEMR calls on the EU to recognise their leadership and equip them with the tools, policies, funding, and governance frameworks needed to act effectively in coordination with other relevant stakeholders.

However, the climate crisis also offers an opportunity to transform policies into green policies in partner countries, as climate adaptation is also a shared global challenge that requires collaboration beyond Europe's borders. Through decentralised cooperation, European municipalities and regions can exchange expertise, develop peer to peer actions, develop capacity building support partners in vulnerable territories, and promote locally driven adaptation models worldwide. Strengthening these partnerships contributes to global resilience while reaffirming the role of local and regional governments as key actors in international climate solidarity.

As the Integrated framework for European Climate Resilience and Risk Management takes shape, this policy paper offers a timely opportunity to ensure that cities and regions are not only implementers but strategic partners in designing, financing, and monitoring resilience measures. This close cooperation will ensure that the EU can transform adaptation from a policy goal into tangible local action.

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About CEMR:

The Council of European Municipalities and Regions (CEMR) is Europe's first and broadest association of local and regional governments. We are the only organisation that brings together 60 national associations of local and regional governments from 41 countries.

We empower cities, towns, and regions to build peaceful, inclusive, just, and resilient communities by amplifying their voices at European and international levels. Our aim is to ensure that local leaders are fully equipped to drive the sustainable transition of their territories to effectively respond to global challenges.

CEMR also serves as the European section of the global organisation United Cities and Local Governments (UCLG).

1951 Foundation of CEMR

60 national associations of local and regional governments

41 countries

110.000 local and regional governments

1.000.000 locally elected representatives

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