

MAIA Policy Implications and Recommendations: a Regional and Local Level Approach

Executive Summary

Purpose

Regions and municipalities are on the frontline of climate action, translating EU and national strategies into context-specific solutions. This brief distils lessons from MAIA events and case studies across Europe, and highlights priority actions to empower subnational governments as central drivers of Europe's resilience.

This Policy Brief distils knowledge and best practices collected through MAIA Policy Roundtables, Policy-Science Dialogues, Assemblies and Workshops, with a focus on climate action initiatives designed, coordinated, and implemented at the subnational level.

Across Europe, regions and local authorities play a decisive role in turning national and EU climate strategies into context specific and locally tailored, actionable solutions. Four priority themes emerged as essential levers for effective and inclusive climate action at this governance levels: Knowledge sharing and accessibility, multi-level governance coordination, financing and resource mobilisation and integrated planning and evaluation.

Four Priority Themes

1 Knowledge Sharing and Accessibility

Local actors face fragmented datasets, low interoperability in data and tools (including digital twins) that lead to limited capacity to turn knowledge into action. Solutions include investing in open access and interoperable platforms, like the [MAIA Climate Connectivity Hub](#), AI-assisted knowledge aggregation and extraction tools, like the MAIA SummarAlse and SumQA, promoting citizen science for local data collection that complements existing databases, and translating scientific knowledge into actionable guidance.

2 Multi-Level Governance coordination

Institutionalised mechanisms are needed to connect municipalities, regions, national agencies, and EU institutions. Formal frameworks, peer networks, and inclusive engagement strengthen trust, policy coherence, and capacity.

3 Financing and Resource Mobilisation

Public budgets alone cannot meet climate action needs. Regions will need to blend EU, national, and regional public funding with private sector investments and innovative mechanisms such as regional climate funds, well designed carbon markets for regional and local contexts, and resilience bonds.

4 Integrated Planning and Evaluation

It is critical to embed climate resilience in all sectoral policies to ensure effectiveness and coherence, in particular for those related to climate mitigation transitions. Data-driven tools, harmonised monitoring indicators, and adaptive management approaches are essential for responsive and accountable action.

Key Recommendations

- Invest in **digital infrastructures for data discovery, tools for knowledge extraction and capacity-building programmes** to make climate data accessible and usable at the local level by public institutions and all stakeholders;
- Promote **multi-level governance platforms** and encourage local (municipalities) and regional participation in EU networks;
- Simplify **funding access** for regions and small municipalities;
- Enhance **cross-sectoral planning** with adaptive management and harmonised monitoring indicators.

*Building a resilient Europe depends on empowering regions and municipalities with the tools, resources, and governance structures that will allow them to implement ambitious, locally relevant climate actions. By connecting European ambition with local innovation, climate action can be both **place-based** and **strategically aligned** to meet the continent's long-term resilience goals.*

Introduction

*This Policy Brief synthesises lessons learned, good practices, and insights gathered through **MAIA Policy Roundtables, Policy–Science Dialogues, Assemblies and Workshops**, focusing on climate action initiatives designed, coordinated, and implemented at the subnational level.*

*MAIA events demonstrated that **regions and local authorities are essential agents of implementation**. They translate European and national climate objectives into **locally tailored solutions** that reflect the environmental, social, and economic realities of their territories.*

Four interlinked themes emerged as the most critical for delivering impactful local and regional climate action:

Knowledge Sharing and
Accessibility

Multi-level Governance
Coordination

Financing and Resource
Mobilisation

Integrated Planning and
Evaluation

The following sections distill key challenges, highlight proven practices, and present targeted recommendations grounded in concrete experiences from MAIA-supported initiatives.

1

Knowledge Sharing and Accessibility

Key challenges:

- Local and regional actors often work with fragmented datasets and lack access to climate data at the scale and specificity needed for decision-making;
- Limited interoperability between systems can hinder the effective integration of datasets across different levels of governance;
- Scientific outputs are often not promptly translated into understandable and actionable guidance for practitioners.

Good Practices:

- **Regional data-sharing hubs** (e.g., Pyrenean Climate Change Observatory - OPCC), which integrate climate and environmental information across seven territories, demonstrating the value of shared data platforms;
- **Climate literacy programmes and awareness campaigns** run by municipalities (e.g., Cascais municipality located in Portugal), empowering communities to participate in energy transition initiatives;
- **Citizen-driven data collection** supporting behavioral change and participatory decision-making, strengthening public engagement in local climate actions;
- **Interoperable climate risk platforms** (e.g., in the Basque Country), to allow municipal planners to integrate regional climate projections directly into zoning and infrastructure planning.

Policy Directions:

- Invest in **open, interoperable digital infrastructures** like the MAIA Climate Connectivity Hub, ensuring local and regional actors can integrate and visualise EU-level data alongside their own;
- Fund **targeted training programmes** so local technical staff and decision-makers can interpret climate data and apply it to planning;
- Promote **citizen science** as a recognised source of complementary environmental data and as an engagement and awareness raising opportunity and establish clear protocols for its integration into official datasets;
- Support the development of vendor-independent AI tools that **streamline the translation of complex climate science findings into concise, actionable guidance**, making the process faster and more cost-effective for municipal engineers, planners, and community leaders.

2

Multi-level governance coordination

Key challenges:

- Persistent silos between sectors and levels of government reduce policy coherence;
- Informal coordination mechanisms often depend on individual champions and lack institutional permanence;
- Capacity gaps, particularly in smaller municipalities, limit participation in EU-level initiatives.

Good Practices:

- **Transborder collaboration models**, such as the Pyrenean Climate Change Strategy 2050 (EPiCC), created through extensive stakeholder engagement and joint planning across administrative boundaries;
- **Regional data-sharing hubs** - e.g., the Pyrenean Climate Change Observatory - OPCC, which included over ten years of **participatory governance** involving more than 660 stakeholders and showed how multi-territorial agreements can align local climate needs with a shared transborder climate strategy;
- **Participation in regional and international networks** (e.g., Climate-ADAPT, Race to Resilience, Regions4 RegionsAdapt initiative), which enable peer-to-peer learning, exchange of technical expertise, and replication of successful local initiatives at broader scales;
- **Municipal-level Climate City Contracts**, enabling alignment with national ministries and EU institutions for climate neutrality and adaptation.

Policy Directions:

- Institutionalise **formal coordination bodies** connecting municipalities, regions, national authorities, and EU institutions to sustain collaboration beyond political cycles;
- Support participation in **regional and international peer networks** (such as Climate-ADAPT) to exchange experiences and replicate successful practices;
- Encourage **cross-sector working groups** bringing together energy, water, agriculture, and infrastructure planners for integrated climate decision-making;
- Embed **community engagement** and transparent communication in governance processes to build trust and legitimacy.

3 Financing and Resource Mobilisation

Key challenges:

- Complex eligibility criteria and administrative burdens deter small municipalities from applying for EU funds;
- Local authorities often lack the technical capacity to develop investment-ready climate projects;
- Reliance on public funds is unsustainable without mechanisms to attract private investment.

Good Practices:

- **Community-owned renewable energy projects**, such as those implemented in Cascais and in Austria, where revenues are reinvested locally and vulnerable households benefit directly from reduced energy poverty;
- **Regional climate funds, carbon markets, and climate-aligned budgeting practices** (e.g., in Andalusia, Catalonia and Lombardy), supporting early-stage adaptation and mitigation actions;
- **Use of European funding instruments** (e.g., Climate City Gap Fund) in collaboration with subnational authorities, enabling early-stage project design and readiness.

Policy Directions:

- Develop **regional climate funds** and **resilience bonds** to pool resources and attract private co-financing;
- Scale up **blended finance mechanisms** combining EU, national, and regional public funds with private sector contributions;
- Explore **introducing remuneration schemes**, e.g. tax incentives, instead of the current money-transferring practice;
- Offer **technical assistance hubs** at the regional level to help municipalities design bankable projects and navigate funding requirements;
- Emphasize the role of **public procurement** for fostering and emerging innovations;
- Prioritise financing for **community-owned renewable energy** and **nature-based solutions (NBS)** with high socio-economic co-benefits.

4 Integrated Planning and Evaluation

Key challenges:

- Climate objectives are still not systematically embedded in sectoral policies;
- Monitoring frameworks at the subnational level are inconsistent and not aligned with national or EU indicators.

Good Practices:

- **Regional food systems strategies** integrating agriculture, biodiversity, and climate adaptation (e.g., Alentejo's regional climate approach linked to food systems resilience);
- **Agroecological transitions using modelling tools** to design policies that support sustainable land use and emissions reduction at the local level (e.g., agroecological planning in Western Greece);
- **Urban planning approaches** embedding adaptation into mobility, energy, and housing strategies, creating synergies across sectors;
- The **Basque Climate Change Strategy 2050**, which integrates climate objectives across energy, transport, urban planning, and health, ensuring alignment with the EU Green Deal target.

Policy Directions:

- Mandate **cross-sectoral planning frameworks** at the regional and municipal levels that align with EU and national climate strategies;
- Institutionalise the use of **data-driven planning tools** to identify co-benefits and avoid maladaptation;
- Establish **harmonised monitoring indicators** linked to the SDGs to track progress and facilitate reporting to higher governance levels;
- Build **adaptive management into local climate plans** so they can be revised in response to new data, risks, or innovations.

Conclusion

A Strategic Mandate for National Governments

Empowering **regional and local authorities** is fundamental to delivering climate action that is effective, equitable, and context-specific.

By:

Investing in open knowledge systems and climate literacy

Embedding multi-level governance in formal structures

Mobilising blended financial resources

Institutionalising integrated, adaptive planning

The EU and Member States can enable municipalities and regions to deliver ambitious, locally relevant climate action that contributes to continental resilience goals. A resilient Europe will be built **from the ground up** - through transparent, inclusive, and coordinated action that connects local innovation with European ambition.