

COMMENT OPEN



Adaptation to climate change: EU policy on a Mission towards transformation?

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This comment piece seeks to remind readers of the urgency and importance of adaptation to climate change in the European Union, note significant recent policy developments, and highlight some of the opportunities that one particular aspect of EU policy, the new Mission on Adaptation, affords communities and policy makers to identify and develop more transformative actions. It offers initial suggestions for how social scientists might engage with these opportunities between now and 2030, but also stresses the need to consider them realistically in the context of the contemporary EU political landscape.

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INTRODUCTION

Europe, according to recent assessments, is warming twice as fast as other continents, and increasingly susceptible to a range of associated climate impacts¹. This will come as no surprise to many Europeans, who more than ever between 2021 and 2023 have experienced the debilitating effects of overheating homes and buildings, wildfires, drought and increased flooding^{2,3}. Latterly, senior EU politicians have mooted the idea of an annual day of remembrance for the victims⁴.

Whilst these make for unsettling, indeed frightening times⁵, adaptation to climate impacts also presents some important opportunities—to reform unhelpful, ‘maladaptive’ policies in particular sectors, address entrenched societal inequalities, and widen the range of voices involved in key decisions through which communities might re-invent themselves to better face a warming world, to name three.

This Comment piece seeks to remind readers (particularly social scientists) of some of these opportunities, how they might themselves engage with them, but also considers them realistically in the context of contemporary EU political landscape.

THE INCREMENTAL EMERGENCE OF EU ADAPTATION POLICY

It is something of a commonplace that the wide variety of local circumstances and challenges means that adapting to climate change is mostly a matter for local or regionally-led action. Local and regional authorities, it is suggested, offer venues for the kind of experimentation and networking seen as critical in the literature on polycentric climate governance⁶, and many have adopted this role enthusiastically⁷. Several analyses have identified the capacity of local or regional level actors to develop transnational networks with potential to build momentum for more effective global level action^{8,9}. At the same time, the important role of national governments to set conducive frameworks and ensure that adequate action is occurring has also been increasingly accepted^{10–12}.

After some reticence on the part of policy makers to acknowledge its importance and urgency, particularly in the industrialised world, the global profile of adaptation has grown in the last decade or so, such that it is now recognised alongside longer-

established mitigation concerns by UNFCCC processes, including the Paris Agreement¹³.

In Europe, there are several good reasons why the institutions of the EU should also play a supranational role, and why adaptation policy has increasingly become a responsibility that, like mitigation, is shared between different governance levels. These justifications for EU involvement—rehearsed in various stakeholder consultation exercises held periodically since 2005^{14,15}—include benefits from jointly developing scientific knowledge on current and future climate impacts to inform better decisions, and the need to manage cross-border spill-overs that might result from adaptive actions (or absence thereof) undertaken by individual Member States. The need for coordination or mutual adjustment between strategies emanating from different governance levels is also highlighted in both policy documents and academic literature alike¹⁶. The fact that effective spending of EU budgets for agriculture and regional development may be at stake, and also the smooth functioning of the single market with its extensive international supply chains, has galvanised policy action.

The need to show solidarity and prevent worsening climate impacts weakening cohesion between Member States^{17,18} is also receiving increased—albeit belated—attention, as evidenced by the recent coinage by the European Commission of the term ‘just resilience’¹⁹. And increasingly, the success of mitigation effort is seen to depend on its resilience to climate impacts, including protection of precious carbon sinks (think damage to forests from drought and wildfires), and adequate water supplies, for example, to cool power stations²⁰ or allow carbon capture and storage²¹. These latter concerns have raised interest in nature-based solutions as a means to mitigate and adapt to climate change simultaneously²².

These rationales find expression in the EU’s latest adaptation strategy, adopted by the Commission in 2021²³ (after less formalised previous efforts), and in its moves to create more of a civil protection/ disaster-response capacity for Member States to draw upon²⁴. The 2021 strategy (part of the wider European Green Deal) pursues more of a ‘whole-of-government’ approach than its predecessors, aiming to make adaptation ‘smarter, faster and more systemic’ while also minimising the risks to EU countries from climate impacts occurring beyond European borders. The

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2021 European Climate Law added further support by calling explicitly for the EU and Member States to make progress on adaptation²⁵, while transnational networks of local authorities, such as the Covenant of Mayors for Climate and Energy, continue to express their backing for EU-level action, in part to secure more reliable support for their efforts from national governments²⁶. Broadly in line with IPCC terminology²⁷, EU-level discourse is now peppered with references to the importance of ‘transformative’ adaptation—going beyond incremental adjustments, to undertake changes to more fundamental attributes of social-ecological systems, or prioritising the most vulnerable – and ‘climate resilience’, as well as climate neutrality.

CHALLENGING POLICY INERTIA

While recent strategies have driven a certain amount of progress, a continued lack of knowledge, political support and adequate budgeting on the part of national and sub-national policymakers continues to undermine policy implementation in many cases²⁸. Local politicians may lack the remit to act in key respects^{7,29}. Moreover, recent analysis of action at the municipal level highlights how policy making is still too constrained by existing silos between sectors, and characterised by a lack of meaningful stakeholder involvement, especially by the most vulnerable²⁷.

While it has at times hinted that it could adopt a more regulatory approach to spur action from the more laggardly Member States³⁰, in its latest strategy the Commission preferred not to risk provoking national governments, but instead pressed for progress at regional/ local level through an innovative new approach: the EU Mission on Adaptation³¹. The Mission initiative is one of five of its kind (including one for Climate Neutral Cities), inspired by the concept as propounded by the economist Marianna Mazzucato in her recent advisory role to the European Commissioner for Research, Science and Innovation³², and by a number of pioneering attempts to deliver more transformative forms of adaptation^{33,34}. Its role is championed by a Mission Board for Adaptation to Climate Change and Societal Transformations.

At the first annual conference of GreenDeal-NET³⁵, Philippe Tulken, Deputy Manager of the EU Mission on Adaptation to Climate Change, explained the significance and potential of this new development to support at least 150 European regions and communities between now and 2030 to develop visions of a climate-resilient future and the innovation pathways by which to reach them, and in testing solutions and ‘preparing the ground for deep-rooted systemic change’. Ultimately, the Mission aims to deliver 75 ‘large-scale demonstrations of systemic transformations to climate resilience across European regions and communities’, able to inspire others to follow suit³⁶.

The Commission hopes that funding from the Horizon research budget, in the order of EUR1 billion, will ‘crowd in’ substantial additional investments, both public and private. It envisages building upon existing institutions, or establishing dedicated new local governance structures, to steer the transformation through inclusive and deliberative processes. Citizen engagement is at the heart of the Mission, and particular efforts will be made to support less developed regions that may be more vulnerable to climate impacts and often lack adaptive capacity, including partnering with more advanced counterparts.

These ambitious objectives and opportunities to make progress will make the Mission a fascinating topic for governance and policy research. Indeed, Commission staff have appealed for increased involvement from policy and governance researchers and social scientists more widely, to contribute directly to the development of Missions in practical ways, as well as treating them as new objects of analysis.

POINTERS TOWARDS A POLICY AND GOVERNANCE RESEARCH AGENDA

What sorts of research questions might we consider, then, when observing this significant new governance experiment? The perhaps surprising absence of a clearer definition of resilience from the Mission’s implementation plan provides one point of departure; in particular, how will ‘just’ resilience be interpreted, and what difference might that make in terms of the outputs, outcomes and ultimate impacts in the regions and communities involved? The Commission has apparently left this agenda for Mission participants to pursue, and work on conceptualising and measuring has recently begun³⁷.

Secondly, will the Mission’s participatory ideals be delivered in practice, and, in turn, allow more transformative concepts to win approval—even in the face of inertia or opposition from key interests³⁸? While research has been published suggesting that wide participation is more likely to deliver transformative solutions in cases of adaptation planning processes than for mitigation³⁹, the strength of this finding could benefit from additional cases.

Thirdly, given that the Mission follows an essentially bottom-up governance model, will coordination mechanisms between the separate regional initiatives be strong enough to ensure coherent outcomes across boundaries, including across national jurisdictions? Given cross-national coordination has been found wanting by recent reviews of EU adaptation policy⁴⁰, will national governments act to facilitate it better now, and how far will they be willing to incorporate emerging Mission-derived outputs in their own national adaptation plans⁷?

Similarly, and fourthly, a set of questions occur regarding wider policy coherence. How far will Missions-related planning contribute to fostering synergies and coherence across economic, social and environmental policy siloes? Can synergies be found between mitigation and adaptation strategies, despite two separate Missions (on adaptation and climate-neutral cities), potentially being pursued simultaneously in the same locality⁴¹? And what might happen if transformative proposals emerging from the Mission areas run up against the often rather static assumptions underpinning existing environmental policies and regulations, at national or EU levels⁴²? What kind of policy influence could Mission participants, acting as a newly formed transnational network, be able to muster at EU level?

Fifthly, with the fiscal rules constraining public spending in the EU likely to remain relatively tight⁴³, how far will private sector actors and public authorities shift the basis of their relationships to develop and deliver new visions—including raising the finance required for investments in public goods that the private sector has hitherto not seen as within its remit⁴⁴? Can a more collaborative approach emerge? The crucial importance of this factor has been stressed by Mariana Mazzucato herself³².

The question of whether ‘laggard’ regions, choosing not to engage with the Mission(s) will effectively fall further behind, or will find inspiration to raise their ambitions, is one to keep in mind for longer-term analysis⁷.

These are just a few questions that might inspire social and political science-informed inquiry, findings from which could usefully guide those taking the Mission forward between now and 2030.

HOPE, TRANSFORMATION AND POWER

In increasingly anxious times, continued and indeed increased civic engagement and democratic participation are likely to require opportunities to participate in the development of hopeful visions for the kind of futures societies could be *moving towards*, not just nightmare visions of the catastrophes they must *run from*. The EU’s *political* resilience, particularly in the face of populist challenges, may to some degree depend on it. Such sentiments

motivated many of those championing the Mission approach to climate adaptation⁴⁵.

In contrast to the commonly held assumption that adaptation can be an essentially 'depoliticised'⁴⁶, consensual and technocratic exercise, social scientists know that these processes will be necessarily political and subject to various power dynamics at multiple levels. Let us therefore turn our attention as social scientists to the ongoing Missions experiment, for what it will tell us about the evolution of governance and politics in the EU. But also, as citizens, let us further consider what the academic community can contribute to shaping 'deep-rooted systemic change' from the Mission, and similar processes, including the kind of reforms within academia⁴⁷ and to wider EU Horizon research priorities that might be necessary to facilitate such a contribution.

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COMPETING INTERESTS

The author declares no competing interests.

ADDITIONAL INFORMATION

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