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OPINION

The urgent need for social science and humanities knowledge for climate action in Europe

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To meet its 2050 climate neutrality goal, the EU must undergo a rapid economic and societal transformation. While scientific knowledge on the causes and impacts of climate change is established, comparatively little research focuses on understanding the myriad social and political aspects of this transformation. Natural science disciplines have robustly established that climate change is a paramount challenge for humanity and, indeed, these disciplines have received the lion's share of funding for climate research [1]. The resultant knowledge gap is, however, jarring, as the barriers and delays to climate action are primarily embedded in social and political domains.

We are increasingly confronted with real-world evidence of the failure to pay sufficient attention to the political and societal dimensions of sustainability transformations. Contentious politics and social unrest, in the forms of the French 'yellow vests' (2018–2020) and farmers' protests (2023–2024), are prominent examples that demonstrate public discontent and backlash to how the economic burdens and benefits of the EU's green transition are distributed in a context of cost-of-living strains. Societal sentiments of disenfranchisement have led some segments of the population to shift their political preferences to support far-right parties that prevent or delay climate policy [2,3]. Other segments of society, including youth involved in climate movements, argue that the EU is not decarbonising quickly (or radically) enough, given the gravity of the climate emergency [4]. EU policymakers need to rapidly bridge the gap between climate mitigation and adaptation action and achieving a just transition for all citizens.

Against this backdrop, research from social sciences and humanities on sustainability transitions is crucial, including to elucidate the relationship between democracy and climate governance in Europe. We need to understand the actors and institutions driving societal transformations, as well as those perpetuating "climate obstruction" [5]. Enduring climate policies include not only ambitious targets, but also social dimensions [6]. We therefore propose four research sub-fields that warrant urgent investigation.

First, public participation in climate governance is a vital area for enquiry, particularly in multi-level governance contexts, such as the EU [7]. Societal engagement in the design of climate policy, and the response to climate impacts, is a requirement for the legitimacy of a just green transition. We still have insufficient knowledge about how citizens' assemblies and similar processes for public engagement can be effectively integrated into policymaking. For example, social scientists can identify best practices for the design and organisation of these public engagement processes, understand institutional/administrative factors that explain different approaches, and investigate what wider democratic impacts and practices may emerge from deeper public engagement [7,8].

Second, we need to better understand the agency and ability of climate movements to impact policy decisions [4]. Climate justice groups continue to put pressure on governments to adopt more ambitious climate action through disruption, protest, and awareness raising. Other groups engaging in protests, including some farmers, call for fewer environmental measures. Existing research on the history of whether, when, and how social movements drive policy outcomes and societal transformation is an important foundation for a research agenda on the impact that these movements have on the EU's energy transition [4].

Third, the idea and vision of the just transition in the EU needs greater exploration. A key component of the European Green Deal proposed by Commission President Ursula von der Leyen at the onset of the 2019–2024 political term, a just transition refers to a climate transition that must work in the interest of all citizens and ensure that marginalised and vulnerable groups are not "left behind" [9–12]. Normative questions on the pace, form, and reach of a just transition, which avoids both climate delay and vulnerable workers/communities being "left behind," needs to be fleshed out [13]. More work must also consider those actors who may be economically, politically, and socially sidelined by decarbonisation processes, including in developing countries [12], community groups, and women [10]. Equally important is further research on decision making processes and mechanisms, to establish the opportunities and means for marginalised and disenfranchised groups to seek climate justice when their rights are infringed [8].

Finally, research on the politics and democratic legitimacy of the EU's institutions in the climate transition is needed [11,14]. Such research should continue to investigate the mechanisms that enhance or hinder accountability and transparency, and assess how knowledge informs decision making processes [15]. This includes exploring the mechanisms that may mitigate political contestation that delays climate action in the EU. The June 2024 European Parliament elections revealed another shift to the right in European politics, and an increasingly divisive political landscape between EU and member state levels: understanding how the representative institutions of the EU can advance climate action in the face of challenging political contexts is imperative.

Climate impacts are increasingly intense and frequent, causing untold impact to communities and societies. Climate change will transform our societies regardless, but the choice for a governed climate transition urgently requires more support and uptake of social sciences and humanities knowledge. The EU needs to implement a rapid, just, and multi-level climate transition. Although the bloc has managed to adopt several important climate policies during the 2019–2024 political term, such as the European Climate Law, citizens have mobilised in favour of, but also against, certain forms of climate action. For the 2024–2029 EU political term, advancing the transition to climate neutrality urgently requires extending established knowledge and investing in new research on understanding and managing such a deep transformation from social sciences and humanities' perspectives.

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