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Research and Innovation Agenda for overcoming fragmentation issues for Social Sciences and Humanities representation in climate, energy, and mobility research

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SSH CENTRE

Social Sciences & Humanities for Climate, Energy aNd Transport Research Excellence

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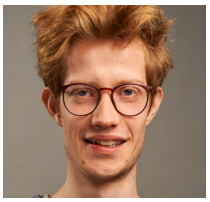

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Introduction

Social Sciences and Humanities in European climate, energy, and mobility research

Social Sciences and Humanities (SSH) research is typically marginalised in climate, energy, and mobility research, despite its central role in understanding social drivers and solutions of sustainability challenges. On a global scale, in a 10-year period, less than 1% of research funding into climate was dedicated to SSH research[1]. However, there is growing recognition that addressing climate change requires changes to human behaviours, economic, cultural and social systems, and governance and policy[2]. Indeed, we as the SSH CENTRE project[3] have directly contributed to this increasing evidence basis, through our policy-focused interdisciplinary work between SSH and Science, Technology, Engineering and Mathematics (STEM) researchers, as well as through our transdisciplinary knowledge brokerage work with engaged city municipalities. It is therefore clear that a growing contingent of both European research and policy communities are calling for more SSH to be supported and fully integrated into climate, energy, and mobility research.

The European Commission (EC) has sought to support SSH research across the Horizon Europe Framework Programme through a number of initiatives. Firstly, and most notably, the EC has continued the Horizon 2020 commitment of 'SSH mainstreaming', which has involved classifying particular calls as being 'SSH-flagged' topics. The First Monitoring Report on SSH-flagged topics in Horizon Europe[4] focused on quantitative indicators of SSH inclusion. It found that 26% of topics in Cluster 5 were flagged as SSH relevant between 2021 and 2023. As a result, 27% of the SSH-flagged budget went to SSH partners, which represented approximately 6% of the overall Cluster 5 budget. Secondly, specifically in 2025 for Cluster 5, the EC has also launched a Societal Readiness Pilot, which is using SSH insights to intervene in the processes behind STEM-led Research & Innovation. The Pilot's focus is on using Responsible Research & Innovation (RRI) thinking to ensure societal needs and concerns are appropriately accounted for. Additionally, the Net4Society network of Cluster 2 national contact points provides support and guidance on integrating SSH research across all of Horizon Europe, including via brokerage events and training for National Contact Points in other clusters.

Against this backdrop, the SSH CENTRE project has sought to understand the factors that shape successful SSH integration based on the experiences of those performing the research. Across 3.5 years, the SSH CENTRE provided a series of

1 Overland, I., & Sovacool, B. K. (2020). The misallocation of climate research funding. *Energy Research & Social Science, 62*, 101349.

2 Rosamond J., Dupont C., Lerum Boasson E., Burns C., Maltby T., Oberthür S., et al. (2024). The urgent need for social science and humanities knowledge for climate action in Europe. PLOS Clim 3(7): e0000450. https://doi.org/10.1371/journal.pclm.0000450

3 SSH CENTRE is a Horizon Europe funded 'Coordination & Support Action' project, aiming to build capacity and opportunities for high-quality, policy-relevant Social Sciences and Humanities (SSH) research on climate, energy, and mobility. It is €3m, runs 2022-2026, and hopes to support both European Commission and local policy ambitions.

4 European Commission: Directorate-General for Research and Innovation, *Integration of social sciences and humanities in Horizon Europe – First monitoring report on SSH-flagged projects funded under Pillar II of Horizon Europe – 2021-2023*, Publications Office of the European Union, 2025. https://data.europa.eu/doi/10.2777/6733555

opportunities for researchers to create and run new SSH-led interdisciplinary and transdisciplinary collaborations. We called these 'epistemic experiments'. Through a process of Formative Accompanying Research[5], the team evaluated these experiments and identified 10 challenges experienced while conducting interdisciplinary and transdisciplinary collaborations. These challenges have been summarised in 10 Briefing Notes[6], which highlight the role of structures, framings and processes of broader research and funding systems in creating or ameliorating the challenges.

The SSH CENTRE Research and Innovation Agenda

This Research and Innovation Agenda focusses on five 'enabling conditions' that can be embedded within the structures and processes of European Framework Programme funding to support SSH-led interdisciplinary and transdisciplinary research, and address some of the challenges currently experienced. We draw on the Formative Accompanying Research, the resulting Briefing Notes (BNs), and on other SSH CENTRE outputs to synthesise these conditions.

The five enabling conditions are about how funding calls can be structured, and the processes that funders can embed within funded projects, rather than specific topics or knowledge gaps that need SSH attention[7]. Where possible, and as emerging from the SSH CENTRE research, we provide example actions of how these enabling conditions could be enacted. However, SSH CENTRE is not a funding decision maker nor a lobby group. We therefore encourage readers to consider these conditions as principles that can be met in a variety of ways. As such, while these example actions are targeted to European Framework Programme funding, we intend that they can be interpreted or adapted by research funders more broadly.

We expect that this Research and Innovation Agenda will prompt reaction from research funders. We want to encourage a rethink of some of the framings, structures and processes that challenge meaningful SSH engagement in European climate, energy, and mobility research. We intend that by discussing the ways in which our proposals might be possible or problematic to implement, we can surface some of the deeper challenges to SSH engagement and begin to identify improvements that can be made.

In light of its role in prompting discussion, the RIA was discussed at a roundtable event in Brussels in January 2026. Participants were high-level current/former representatives of the relevant units in DG RTD and CINEA, as people who could provide informed reaction. A reflection produced as a result of this roundtable is provided as an addendum to the Agenda. We hope that together these outputs will act as foundational resources for dialogue between SSH researchers (who may be wanting grander changes to Framework Programmes), and EC policy officers (who are having to work pragmatically within institutional constraints).

5 Leventon, J., Gerlich, V., & Prášilová, T. (2025). T5.1 Formative Accompanying Research (FAR). Zenodo. https://doi.org/10.5281/zenodo.17551759

6 Leventon, J., Gerlich, V., Prášilová, T. (eds.), 2025. *Ten challenges for successful inter- and transdisciplinary collaboration: Briefing Note collection of SSH CENTRE*. Cambridge: SSH CENTRE. https://doi.org/10.5281/zenodo.17608088

7 Other work has already undertaken such identification of specific topics and knowledge gaps. For example, the Horizon 2020-funded Energy-SHIFTS project undertook Horizon Scanning exercises that identified SSH research priorities for: energy efficiency (Foulds et al., 2022: https://doi.org/10.1057/s41599-022-01243-z); smart consumption (Robison et al., 2023: https://doi.org/10.1016/j.jclepro.2023.137946); transport and mobility (Ryghaug et al., 2023: https://doi.org/10.1080/01441647.2023.2167887); and renewables (Krupnik et al., 2022: https://doi.org/10.1016/j.erss.2022.102536).

Five enabling conditions for supporting Social Sciences and Humanities collaboration

1. Tangible support for establishing a strong basis for collaboration

In current short-term funding (3-4 years), the emphasis is on producing outputs quickly [BN4, BN5]. This does not allow space for the kinds of deliberation and engagement that are needed to collaborate across disciplines. There are challenges around finding shared language and navigating shared terminology and concepts [BN6], creating spaces for communication [BN8] and fostering reflexivity [BN9]. Such processes are pushed outside the frame of the funded project. Such expectations of building foundations outside the project frame create a barrier to meaningful participation by those stakeholders and researchers who do not work in conditions to support it (e.g. those whose salaries rely on funded time).

Research funding could help provide space dedicated to establishing the strong foundation for collaboration within inter- and transdisciplinary teams.

Example actions:

- Funding could be structured around two-stage research projects, with the first stage providing funding for Year 1. The first year should be committed to developing the full second stage project proposal and establishing the shared language, expectations, and processes to implement it.
- Consortium Agreements, Descriptions of Action, and Project Officers could formally recognise and support paired coordinator roles. Such roles could be within a single institution, or across multiple institutions, and would allow project leadership to be effectively shared across STEM and SSH researchers.
- The Commission could require that all inter- and transdisciplinary projects must create a deliverable that establishes working expectations and common language by Month 6 of a project, in common with requirements for e.g. a Data Management Plan and Communications, Dissemination and Exploitation Plan.

2. Reframe the scope of 'applied' science for policy relevance

Existing funding calls are often set around knowledge gaps for meeting agreed policy goals (e.g. the European Green Deal). There tends to be emphasis on technologies and data for decision-making, with SSH being employed in service, and therefore subordinate to STEM perspectives [BN1]. Such framing positions climate, energy, and mobility research as a technical discipline, with the role of SSH to understand citizen acceptance, and uptake. This leads to instrumental engagement with SSH researchers [BN1, BN10]. However, SSH research can address the core social processes that are the indirect and underlying causes of these problems. As such, it can unpack critical challenges around the paradigms within which technologies or innovations become relevant. It can explore the directions society is heading and examine the roles different actors play and can guide the creation of social innovations and the roles of technology therein. In this way, SSH is important for exploring the policy-relevant aspects of legitimacy, trust, and values within democratic transformations to sustainability.

Research funding can push for deeper philosophical and ethical reflections by considering them as being relevant to shape and contextualise applied research, and open broader knowledge to inform and rethink policy goals.

Example actions:

- Funding calls within the topic of climate, energy, and mobility could be targeted towards more philosophical and ethical perspectives on innovations and the roles of technologies, with an emphasis on Humanities research therein. This example is intended to be in addition to, not instead of, SSH flagged calls.
- Funding calls could avoid the term 'social acceptance', which reinforces framings of SSH in service to STEM. Rather, the framing of SSH in calls should emphasise that participation, deliberation, and SSH can allow social innovation to emerge, and can open perspectives beyond pre-determined outcomes and technologies.
- Proposals could be evaluated for their SSH-led interdisciplinarity, both in the coordination of projects and in the framings of the objectives and methodologies being proposed.

3. Integration across topics

Funding calls are currently structured into separate topics, for example topics related to sustainability in Horizon Europe are spread across Cluster 2 (culture, creativity, and inclusive society), Cluster 5 (climate, energy, and mobility), and Cluster 6 (food, bioeconomy, natural resources, agriculture, and environment). But all of these topics are linked, particularly through shared indirect (social) drivers and possible solutions to environmental problems, and SSH often focusses on bigger social questions that underlie all these topics. Separations in organisational structures and disciplinary perspectives prevent shared learning across topics [BN3]. Shaping the funding by topics in this way creates separate identities of e.g. Energy Social Science and excludes those who do not recognise themselves within this description. It can make it hard to support research that looks at social and human dimensions that span across problem topics.

Research funding can be structured to support cross-topic thinking with a focus on social dimensions of unsustainability.

Example actions:

- The Commission could create a cross-cutting "Sustainability in a Democratic Europe" cluster to fund SSH-led research on the social drivers, conflicts and democratic governance of sustainability across Clusters 2, 5, and 6. This would be distinct from the solution-oriented Missions, and focused on providing a stable basis for critical SSH-led research across sustainability themes.
- DG-RTD could bring together projects across Clusters where there are shared social considerations. For example, all Cluster 2, 5, and 6 funding calls that ask for R&I relevant to sustainability transformations could include a request for projects to budget for 2+ networking meetings in Brussels. This should include facilitation and direction from the European level, in contrast to the current bottom-up 'sister project' expectation.

4. Recognition of local manifestations of sustainability challenges and solutions

The framing of funding calls is currently focused on European scale applicability. However, SSH research often recognises that the local and contextual factors are critically important in shaping experiences and responses to environmental challenges. The local manifestations of problems, the conditions within which solutions can emerge, and their acceptability must be understood. This requires time and space for stakeholder engagement within local case studies, and for context-specific explorations of social processes [BN2, BN8, BN10]. Framing calls and expected outputs at a European scale can close down the spaces within a project for meaningful, community-based SSH work[8]. This is particularly the case where local actors have to locate themselves within European-wide problem framings and narratives. It can be exacerbated when local actors are not engaged as partners in the projects but are rather engaged only through (uncompensated) workshops and consultations.

Research funding could promote local and community-based SSH perspectives on how environmental change and responses to it are created and experienced.

Example actions:

- Funding calls could include a requirement for proposals to include local-scale deliverables and impacts. Deliverables could include collections of case perspectives, or locally-embedded versions of large-scale analyses. Impact sections could include local case study level key performance indicators.
- For calls that especially prioritise local impact, there should be an expectation that local-level stakeholders have a clear role in the project, and that this role is adequately resourced and compensated.
- Specific support could be provided from the EC to support local-level actors in accessing and participating in project consortia, including the removal of jargon, targeted training and outreach, and consideration of simplified reporting requirements.

8 Varjú, V., Tagai, G., Cabello, V., Sorman, A.H., Robison, R., Foulds, C., Bálint, D., Galende Sánchez, E., Zindulková, K., Pálné Kovács, I., et al. (2023). Supporting the Social Sciences & Humanities across Southern and Central & Eastern Europe: A Position Statement for international climate, energy, and mobility research. Cambridge: SSH CENTRE.

5. Recognition of participation and integration as an area of expertise

Every interdisciplinary and transdisciplinary team is different. It takes time, skills and willingness to establish meaningful collaborations and establish clear processes for interdisciplinary and transdisciplinary integration [BN7, BN1]. Understanding how to engage people across disciplines and with stakeholders for inter- and transdisciplinary research is a particular area of expertise with specific skills and capacities. However, coordinators are often disciplinary researchers who can overlook or devalue these particular skills [BN7]. This can close down spaces for meaningful SSH and stakeholder engagement [BN1, BN8, BN10]. SSH researchers can feel that they invest significant (un-costed) time into integration in an effort to compensate.

Research funding could request and support specific expertise related to stakeholder engagement and inter- and transdisciplinary integration and leadership in funded research.

Example actions:

- Proposals could be evaluated on their plans for stakeholder engagement, inter- and/or transdisciplinary integration, and their expertise for implementing them. A specific statement or section on this topic could be mandatory within the implementation section of proposals.
- Periodic reporting and evaluation of projects could explicitly require details on the processes of engaging stakeholders and how SSH state-of-the-art thinking has been utilised towards achieving this impact. This should be done in addition to the more general expectations within existing Communication, Dissemination and Exploitation plans.
- The EC could provide formal training for project coordinators about SSH and its integration. Such training should be completed during the first six months of project implementation. It should be provided at the EC-level to ensure consistency across projects and partners.

Reflections on the Research and Innovation Agenda from a roundtable discussion

Tuesday, 27 January 2026, Brussels

Discussions at the roundtable, and responses submitted via email, demonstrate a diversity of reactions to the content of the RIA. In the roundtable, there was some pushback on the scope of the enabling conditions, and how these played out across existing Commission processes and initiatives. In follow-up communications, opinions did diverge around details, particularly in response to example actions. With this reflection, we do not seek to revise the content of the RIA itself; we stand by the enabling conditions that emerged from our work in the SSH CENTRE. However, we reflect here on key points of divergence and discussion, perhaps clarifying why there are differences in how the topic of SSH integration is framed and addressed. They are our take-away lessons from the roundtable discussion, and we hope that they open up spaces for further consideration by funders in their support for SSH integration.

Enabling conditions need to be considered already in topic drafting, not just in project set-up and support. The enabling conditions outlined in the RIA emerged from bottom-up research which explored the challenges faced by researchers who were attempting to do inter- and transdisciplinary research. We found it important to go beyond focusing on topics, and address some of the broader structural and organisational challenges that research projects could address. However, discussants highlighted that many of these conditions are already shaped in the way topics and call texts are created. If calls are written in a way that ambitiously engages SSH, then the proposals written to that call, and evaluation processes, will need to take SSH seriously. Thus, to be fully effective, our RIA would need to go another level deeper with its proposals (i.e., towards the conditions in which call authors operate).

Better integration of SSH in call texts would require the championing of SSH through the complex, negotiated, multi-actor process of topic drafting. Reactions we have received to the RIA emphasise the necessity of being explicit about the role and utility of SSH. Where this is not clear to topic drafters, and those involved in shaping calls, then the calls will not provide adequate space for SSH. There is an important role for someone to be championing SSH already at the time of topic drafting. However, such championing is currently not strong during the process of negotiation across member states, multiple DGs, and interest groups. Key challenges were cited as relating to the relative under-representation of SSH-trained people (and high turnover of people), the broadness as to what SSH is, the preference for STEM-like approaches in both topic drafting and evaluation of calls (including quantitative SSH, at the expense of qualitative critical SS and H), a lack of tangible examples of the role and utility of SSH, and the lack of a strong SSH interest lobby.

There is a need to carefully consider roles and responsibilities in creating equitable SSH integration. Controversy around a number of example actions relate to who is the right person to deliver them. For example, in condition 1 on establishing a strong basis for collaboration, points are raised around the need for researchers to leverage existing networks during proposal preparation, rather than for funding to be made available for preparatory activities. On our suggestion of delivering training to coordinators, pushback is on whether researchers would take that seriously, and whether this is actually a role for National Contact Points (NCPs) rather than the Commission. These are important considerations in light of the potential to feed into existing drivers of differential access to European funding. For example, researchers in more precarious positions are unlikely to have time funded by their institutions to do such network building and maintenance but look to European funding to secure some contract security[9]. Further, some countries provide better resourcing to their NCPs, and some NCPs have far deeper experiences to draw on in supporting their researchers. Devolving responsibilities in this way could exacerbate access challenges.

A push for simplification in call text, and for framings of 'competitiveness' can be positive for SSH integration, as long as SSH is not subordinated to STEM logic. Some of the RIA's proposals (e.g. for local level impact plans, shared coordination, and a deliverable on outlining common language and expectations across the project) were seen as being difficult within current pushes towards simplification in research funding and calls. However, our suggestions have also been taken further in follow-up responses. For example, a suggestion was made for a separate proposal template for SSH-flagged topics to allow SSH and SSH-STEM collaborations to be presented, and therefore evaluated, on their own terms. Discussions also moved on to the future of the framework programme, and the competitiveness agenda of the European Commission. There are concerns that this framing reduces SSH to an industry logic and quantifiable metrics, and particularly around increasing uptake of technology. It was acknowledged that Humanities have a hard time to find space in such framings, particularly as research is expected to contribute to achieving current policy goals and agendas rather than offer critical reflection or even question them. However, participants were keen to stress that competitiveness is not just about economics, but also about sustainability and social trust – topics within the realms of SSH.

There are reasons to be optimistic about the future of SSH integration. We are grateful to everyone who gave time and energy to engage with the RIA and the SSH CENTRE project. We also note that there are initiatives within the Commission to monitor and understand SSH integration across Horizon Europe. In addition, discussants pointed to the Societal Readiness Levels pilot as an example of SSH integration, and also to the numbers of good quality proposals being submitted to SSH-flagged topics. Previous examples such as the Transitions Super Labs were also mentioned as good practice examples of ways to fund SSH-integrated research. We find it important to acknowledge all these initiatives, and we hope that our RIA and these reflections help support ongoing efforts towards SSH integration.

9 Varjú, V., Tagai, G., Cabello, V., Sorman, A.H., Robison, R., Foulds, C., Bálint, D., Galende Sánchez, E., Zindulková, K., Pálné Kovács, I., et al. (2023). Supporting the Social Sciences & Humanities across Southern and Central & Eastern Europe: A Position Statement for international climate, energy and mobility research. Cambridge: SSH CENTRE. Position-estatement_English.pdf

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