CIRSEAU
Building a water-smart economy and society

Stakeholder engagement in EU-funded inter- and trans-disciplinary research and innovation projects

Experiences from the CIRSEAU cluster projects B-WaterSmart, REWAISE, ULTIMATE, WATER-MINING and WIDER UPTAKE

Recommendations to the European Commission

STAKEHOLDER ENGAGEMENT IS KEY FOR SOCIETAL IMPACT OF EU-FUNDED INTER- AND TRANS-DISCIPLINARY RESEARCH PROJECTS

Since the European Union's (EU) Seventh Framework Programme (FP7), research and innovation funding programmes Horizon 2020 and Horizon Europe have made significant strides to foster continuous stakeholder engagement (SHE) for co-creation and increased acceptance of solutions for water smart societies. The introduction of the Responsible Research and Innovation framework (RRI) and a stronger emphasis on open science, public engagement, and inclusiveness demonstrate the European Commission's (EC) keenness and commitment to ensuring collaborative and inclusive SHE in European research and innovation projects. Research and innovation projects funded by the EU are increasingly inter- and trans-disciplinary (ITD) oriented, particularly within the field of sustainability research. Integrating scientific disciplines and scientific and non-scientific knowledge with the ambition of co-creating innovative solutions to societal problems requires specific expertise, methods and tools. The design and implementation of SHE practices within ITD projects is an area of continued learning and improvement, with best practices and lessons learned documented in both scientific publications and secondary literature. Integrating these insights into the structure of the EU Research and Innovation Programmes is essential to align research outcomes with societal needs and values, thereby enhancing the societal impact of EU-funded projects.

This brief provides recommendations to the EC to continue fostering and strengthening stakeholder engagement in EU-funded ITD research and innovation projects. These recommendations were developed by the Stakeholder Engagement Working Group of the CIRSEAU projects cluster including B-WaterSmart, REWAISE, ULTIMATE, WATER-MINING and WIDER UPTAKE, and endorsed by the five project coordinators, Water Europe and the European Network of Living Labs (ENoLL). The recommendations are derived from principles and actions for effective SHE (see Annex) collected from 35 case studies across the 5 projects and from other sustainability ITD research projects involving partners of the CIRSEAU cluster. While rooted in water-related projects, these recommendations are applicable to all EU-funded research and innovation projects seeking to collaboratively develop solutions with stakeholders.

Key message: *EU Research and Innovation calls for proposal, and proposal and project reviews can support effective SHE in ITD research and innovation projects. This is possible by more explicitly promoting and rewarding the inclusion of ITD methodologies, flexible and context-tailored SHE design, implementation and evaluation, inclusion of Social Science and Humanities (SSH) expertise, adequate allocation of time and budget for ITD and SHE practices. Furthermore, improvements can be made by ensuring proposal and project review committees comprise SSH experts and are properly guided in valuing and rewarding good ITD and SHE practices.*

Effectively engaging stakeholders in ITD research and innovation projects starts with robust ITD and SHE design in the project proposal. It continues with dedicated resource allocation and expertise during implementation, including ongoing learning and adjustment through feedback loop processes. This calls for a supportive environment across the call for proposals, proposal reviews, and project reviews stages. However, calls for proposals, particularly those of a highly technical nature, often only briefly touch upon the importance of ITD methods, SHE and SSH expertise, offering limited guidance to applicants. Additionally, review committees frequently lack SSH experts, and reviewers are not adequately instructed on how to recognise and incentivise strong ITD and SHE practices.

Accordingly, we recommend that **call for proposals** explicitly demand, **proposals** include and **project reviewers** reward:

- Dedicated SSH expertise, time and budget for SHE across all relevant project partners with the ambition to engage stakeholders and foresee training activities to develop SHE skills when needed.

  While some projects designate a SHE work package with dedicated SSH experts and resources to support SHE initiatives, not all partners seeking SHE have access to such local expertise. Often, funding and time commitments are underestimated within the project, particularly when partners are technical organisations primarily focused on innovation development. Ideally, partners aiming to engage stakeholders should secure dedicated SHE experts and allocate sufficient budget and time within the project framework. Alternatively, the project should, as part of its design, assign resources specifically for training partners in SHE methods and practices.

- Dedicated SSH expertise, time and budget for ITD knowledge co-creation.

  ITD research expertise, methods and tools are rapidly evolving. They are driven by the growing demand to integrate knowledge across scientific disciplines (interdisciplinary co-creation) and to integrate scientific and non-scientific knowledge (transdisciplinary co-creation) in sustainability research. Often, ITD co-creation efforts are implicit within projects, with SSH experts tasked with SHE responsibilities also expected to facilitate interdisciplinary project co-creation alongside transdisciplinary collaboration with external stakeholders. Because it's implicit, interdisciplinary project co-creation often lacks sufficient focus, leading to the development of solutions within disciplinary boundaries, thus diminishing their potential impact. Establishing a dedicated task within projects

specifically for interdisciplinary project co-creation (distinct from SHE for transdisciplinary co-creation) with allocated experts, time, and budget would foster a collaborative environment among all partners, facilitating cross-disciplinary cooperation. This is particularly pertinent in technology-driven projects.

- Engagement of key stakeholders already in the project proposal.

    Societal stakeholders, including governments, industry and organised societal groups, are increasingly called upon to participate in EU-funded projects for co-creating solutions to address societal challenges. While these projects may align with stakeholders' interests, active participation is often hindered by constraints such as limited time and resources. Typically, consortia try to overcome such challenges by engaging stakeholders during the proposal phase through a letter of support. These letters should clearly outline the stakeholder's intended role, level of commitment and contributing resources in the project, and how the project aligns with their ongoing initiatives, rather than being a generic declaration of interest. Furthermore, stakeholders whose involvement is essential to the project's success should be invited to join as partners.

- Flexible and context-tailored SHE design, implementation and evaluation.

    Adopting a standardised SHE approach, such as Living Labs (LLs) or Communities of Practice (CoPs), may not be appropriate for every case study within a project. This also holds true for SHE monitoring and evaluation practices. Effective SHE requires flexible, context-tailored design, and continuous adaptation of engagement activities to evolving local and project-specific circumstances. They also need monitoring and evaluation methods that take into account evolving stakeholder relationships and interactions. However, such adaptable design, implementation and evaluation approaches often do not align with the reporting requirements of EU-funded projects. Therefore, there is a need to strike a balance where project calls and reviews reward proposals that include flexible, context-tailored SHE design, monitoring and evaluation approaches while still incorporating robust Key Performance Indicators (KPIs) to enable reviewers to assess the quality and effectiveness of the engagement efforts

- Dedicated activities in project proposals to explore the potential for continuity of SHE practices established within the project.

    EU-funded projects offer the opportunity to initiate stakeholder dialogue around societal challenges. The expectation is that this dialogue will persist beyond the project's duration and potentially solidify into a stakeholder community like a LL, a broad network or will be integrated into a larger CoP. However, depending on the purpose of the project and the existing local circumstances, such continuity is not always desirable or possible. It is preferable, as part of the SHE design within project proposals, to include an investigation into opportunities for continuation of engagement activities or their embedding within established initiatives. Where there is potential for continuation, support with specific actions during the project should be included in the proposal. This approach should be rewarded over a SHE design that promises continuity for every SH dialogue initiated within the project. KPIs for SHE continuity should enable reviewers to assess the quality and effectiveness of the efforts to support continuity.

For **calls** and **reviewers to recognise and reward** the above listed ITD and SHE practices we recommend to:

- Provide dedicated time and resources for project proposal design.

  The typically low success rate of acquiring EU-funded projects, combined with the considerable time and resource investment required for proposal writing, can discourage consortium partners from prioritising the design of projects in an interdisciplinary and transdisciplinary manner, with adequate SHE in the proposal stage. This may lead to a focus on technical content over comprehensive project design. Consequently, awarded projects may encounter difficulties in engaging partners and stakeholders in ITD research processes during implementation. Establishing dedicated funding schemes for proposal writing and allocating budget specifically for robust ITD research design and SHE within these schemes would kickstart projects with a solid foundation for success.

- Have a mix of technical and SSH experts in project review committees.

  Having SSH reviewers in review committees, especially for technical oriented projects, is crucial as they provide constructive guidance and meaningful feedback to project partners throughout project implementation, thus fostering learning and improvement. Additionally, peer evaluation of the work of SSH experts ensures recognition of their contributions to the project. They also ensure the EC receives an accurate account of the project's results, outcomes, and impact.

- Provide guidelines to proposal and project reviewers.

  The EC could consider providing guidelines to reviewers to help them recognise and reward the good SHE and ITD research practices. The recommendations presented in this brief, supplemented by information presented in the Annex, serve as a foundation for developing such guidelines.