Cross-fertilisation: A Dialogue Aid for **SSH and STEM** Researchers



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





rope research and innovation programme under grant agreement 101069529 and from UK Research and Innovation (UKRI) under the c government's Horizon Europe funding guarantee [grant No 10038991]

This infographic helps SSH and STEM researchers navigate interdisciplinary challenges and foster dialogue. It highlights cross-fertilisation—integrating knowledge across disciplines—using examples from our three-volume book series on climate, energy, and mobility policy.



Boundary objects like justice, health, and planning connect disciplines despite differing definitions. These concepts foster collaboration by offering shared points of reference (e.g.,

recognition, equity, or trade-offs).

Navigating Concepts, Definitions, and Topics



4

Insight: By using boundary objects, cross-fertilisation helps reconcile diverse viewpoints, creating a foundation for shared goals.

Insight: Cross-fertilisation of methods enables

researchers to address complex challenges with both rigour and context-specific relevance.

justice framed through

Insight: Recognizing diverse ontologies through cross-fertilisation enhances our capacity to create solutions that respect multiple worldviews

Actors

sight: Cross-fertilisation of knowledge lows for shared understanding across istemic communities, leading to more comprehensive approaches to sustainability challenges.

Include marginalized voices (e.g., Indigenous communities, women, local stakeholders) for inclusivity and epistemic justice. Representation ensures nuanced perspectives and enriches debates. Consider both traditional and alternative actors,

Insight: Cross-fertilisation ensures diverse voices are integrated into the research design, leading to more inclusive and equitable outcomes.



Insight: Developing shared methodologies through sss-fertilisation bridges disciplinary divides and supports cohesive teamwork.

Evidence and Methods

Interdisciplinary research benefits from mixed methodologies:

OUANTITATIVE:



Identify patterns correlations, and trends (e.g., modelling, sampling).



QUALITATIVE:

Provide contextual insights (e.g., ethnography, workshops). Collaborative methods integrate social and technical dimensions ensuring context-driven and evidence-based solutions.

Collaborative methods integrate social and technical dimensions. ensuring context-driven and evidence-based solutions.

Participation

Genuine participation must avoid being performative. It should empower all actors, fostering legitimacy and democratic engagement. Workshops and collaborative efforts bring diverse stakeholders together for meaningful deliberation and innovation.



Insight: Cross-fertilisation of ideas through participatory processes leads to more democratic and impactful outcomes



Policy and Governance

Interdisciplinary approaches align local, national, and EU governance, addressing multi-level complexities. Engaging diverse stakeholders ensures equitable and place-based policies. Examples include energy justice initiatives and frameworks for sustainable development.



governance perspectives facilitates adaptive and inclusive policymaking that reflects diverse needs.





Watch the video by clicking this link or scanning the QR code

