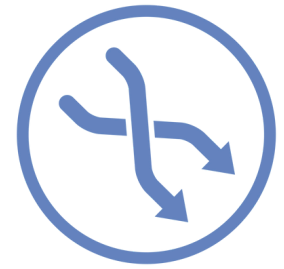


August 2024



# Polycrisis Research and Action Roadmap

Gaps, opportunities, and priorities for  
polycrisis research and action



## Institutional Partner



## Collaborating Partners



Potsdam Institute for Climate  
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## Citation

Lawrence, M., Shipman, M., Janzwood, S., Arnscheidt, C., Donges, J., Homer-Dixon, T., Otto, C., Schweizer, P.J., Wunderling, N. (2024). Polycrisis Research and Action Roadmap 2024: Gaps, opportunities, and priorities for polycrisis research and action. Version 1.0. Cascade Institute. <https://cascadeinstitute.org/technical-paper/polycrisisroadmap>

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# Summary

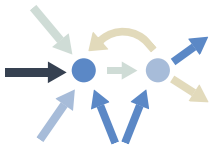
This Roadmap presents a plan to advance polycrisis analysis as an inclusive, credible, and recognized field of knowledge and practice. It draws on the results of a broad consultation of participants in the growing community of polycrisis research and action; and it is intended to provide scholars, policymakers, firms, and funders with a concise yet comprehensive snapshot of this emerging field, including its gaps, opportunities, and potential priorities.

## Five core characteristics of polycrisis

The term “polycrisis” highlights interactions between crises, but there is as yet no agreed upon, authoritative definition of the term. Its proponents, however, broadly agree that the phenomenon has five key features:



1. **Emergent harms:** when crises interact, their impacts are different from—and generally worse than—the impacts the crises would have had separately from one another.



2. **Multiple causes:** interacting crises are not reducible to single root causes; they arise from complex causal interactions that require multifaceted responses.



3. **Deep uncertainty:** crisis interactions generate change that strains comprehension and exceeds our ability to anticipate future developments.



4. **Systemic context:** crises arise within complex systems and, therefore, must be understood and addressed using complex systems thinking.



5. **New knowledge and action:** established frameworks, institutions, and practices are ill-equipped to address crisis interactions; new modes of research and practice are required.

## Gaps, challenges, priorities, and solutions

Over the last two years, the term “polycrisis” has evolved from a loosely applied buzzword into the conceptual anchor for a rapidly growing global research community focused on the systemic inter-relationships among the world’s many problems.<sup>1</sup> But these developments remain patchy and incomplete, resulting in many gaps, challenges, solutions, and priorities across four dimensions of polycrisis analysis:

- **Theoretical foundations:** Those engaged in polycrisis analysis disagree about the conceptualization of crisis versus risk; the plural versus singular nature of polycrisis; the role of power and agency alongside systemic structures in polycrisis analysis; and the nature of crisis interactions sufficient to constitute a polycrisis. While these issues may not be resolvable, theorists should be more explicit about their positions on them to aid knowledge cumulation.
- **Empirical research:** Research has begun to explore past and present polycrises at multiple scales in productive ways, but researchers need to more clearly identify the systems under investigation, the boundaries of those systems, and the particular crises that make up a polycrisis. Key research priorities include identifying the mechanisms of crisis transmission among systems and the lessons of past polycrises, given their commonalities and differences with present and possible future ones. Empirical research should explore and expand the full range of available methods, models, and datasets so as to build a rigorous and inter-disciplinary field of inquiry.
- **Practical applications:** The polycrisis community wants to help policymakers and other frontline actors prevent and respond to urgent, intersecting crises, but the field has a “negativity problem,” limiting its audience and potential impact. Also, policymakers and other frontline actors are largely excluded from the research process. To address these two challenges, organizations conducting polycrisis research should engage communications experts to learn how to better frame polycrisis analysis and identify policymaking “champions” whose expertise and priorities can be integrated into research projects.
- **Community building:** The development of the polycrisis field requires a cohesive identity for polycrisis researchers, wider inclusion of diverse perspectives, increased public outreach, and expanded organizational infrastructure, such as research positions, communications platforms, annual meetings, and cooperative coordination. The polycrisis community should therefore develop a set of shared principles, initiatives to increase participation from the Global South and other underrepresented groups, means to support members intellectually and financially, and strategies to increase communication and understanding both within the group and beyond.

<sup>1</sup> For a snapshot of the polycrisis community, see the Polycrisis Community Map at: <https://polycrisis.org/community-map/>.

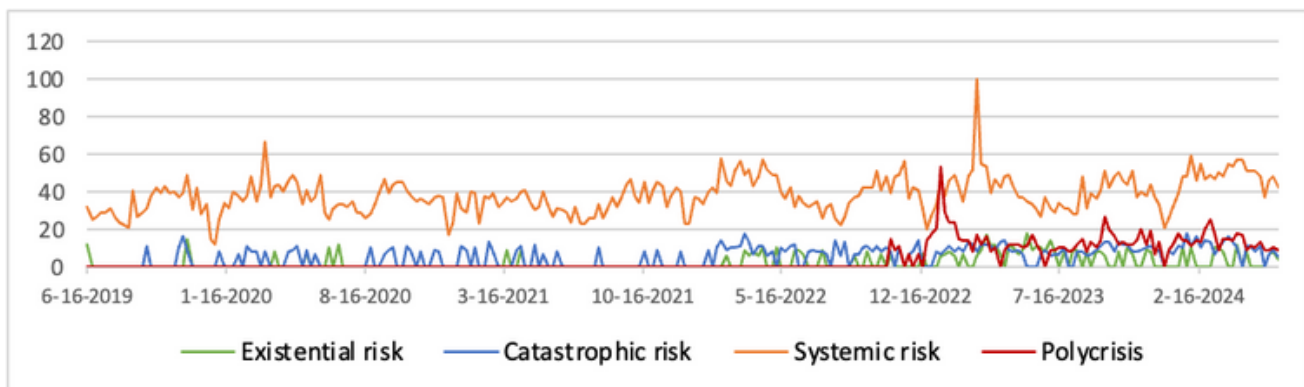
# 1. Introduction

Over the last two years, the term “polycrisis” has evolved from a loose buzzword into the conceptual anchor for a rapidly growing global community studying the systemic inter-relationships among the world’s many problems. This Roadmap aims to further advance polycrisis analysis as an inclusive, credible, and recognized field of knowledge and practice. It provides researchers, policymakers, practitioners, firms, and funders with a concise yet comprehensive snapshot of the state of this still-emerging field, and it highlights the key gaps, challenges, priorities, and opportunities that lie ahead.

After summarizing the development of the polycrisis field and key areas of agreement around this still-contested concept, the analysis highlights gaps, potential solutions, and priorities in four domains: theoretical foundations, empirical research, practical applications, and community building. The conclusion summarizes the highest-priority gaps, solutions, and priorities across the four categories.

## Genesis of the polycrisis concept

**Figure 1.** Polycrisis n-gram



This n-gram shows how frequently the term polycrisis has been used online in comparison to the related concepts of systemic risk, catastrophic risk, and existential risk, as tracked by Google Trends. Figure courtesy of Louis Delannoy, Royal Swedish Academy of Sciences.

The term “polycrisis” has become popular in recent years (Figure 1), at times surpassing in usage more established concepts, such as existential risk, catastrophic risk, and systemic risk. At its core, the term proposes that multiple crises can interact in ways that amplify their conjoined harms and make crisis resolution especially difficult. But as yet there is no universally accepted, authoritative definition of “polycrisis.” Scholars, experts, policymakers, and commentators use the term with growing frequency but for varying purposes,<sup>2</sup> as depicted in the timeline in Figure 2.<sup>3</sup>

<sup>2</sup> For a list of prominent definitions, see: Matlovic & Matlovičová, 2024, pp. 11-12.

<sup>3</sup> This timeline is necessarily selective and incomplete. It provides a sample of prominent attempts to mobilize the polycrisis concept by proponents who believe it to be a productive idea. The timeline does not include important critiques of the concept, which are discussed at: <https://polycrisis.org/lessons/why-are-some-criticizing-the-concept-of-polycrisis/>. See References for full bibliographic information.

Then-President of the European Commission, Jean-Claude Juncker, for example, used the term in the late 2010s to capture Europe's overlapping sovereign debt, international migration, and Brexit crises, which he presumed to have ended (e.g., Juncker, 2018). The World Economic Forum's *2023 Global Risks Report* warned of future (i.e., potential, but not current) polycrises arising from shortages of key resources, such as food, water, metals, and minerals. And economic historian Adam Tooze (2023) later argued that the term polycrisis serves three purposes: (1) it highlights the diversity of shocks impacting global development, (2) it emphasizes that the simultaneous occurrence of these shocks is not coincidental, and (3) it exposes our need for intellectual humility in the face of deep uncertainty about the future.

## Core characteristics of the polycrisis phenomenon

This diversity of views notwithstanding, there is significant agreement on several core characteristics of the polycrisis phenomenon:

**Emergent harms:** The impacts produced by multiple interacting crises are both greater than and different from the sum of the harms those crises would produce separately (e.g., Tooze, 2022; Lawrence et al., 2022; WEF, 2023). Interconnected crises condition, exacerbate, and reshape one another so that they have different impacts when they occur together than they would separately. The energy transition, for example, intersects with growing geopolitical rivalries, food insecurity, and a global cost of living crisis in ways that make it especially hard to reduce fossil fuel emissions and slow the pace of climate change. A polycrisis is not a laundry list of concurrent problems; it is rather a complex entanglement of crises that must be understood in connection with one another.

**Multiple causes:** Given the multiplicity of crises involved, a polycrisis cannot be reduced to a single root cause (such as geopolitical rivalry or capitalism), nor even to a simple set of causes (e.g., Tooze, 2022). If past crises ever had singular causes (and there is reason to doubt they did), they clearly do not today. A polycrisis instead involves a complex array of causes acting at different spatial and temporal scales across multiple systems or sectors. Polycrisis analysis thus demands a multi-, inter-, and/or trans-disciplinary understanding. The climate crisis, for example, originates most directly from our hydrocarbon-based energy system, but that system is bolstered by the fossil-fuel dependence of industrial food production, long-distance transportation, and systems of economic exchange, which are all powerfully reinforced by worldviews that value material consumption and by institutional arrangements that entrench special interests.

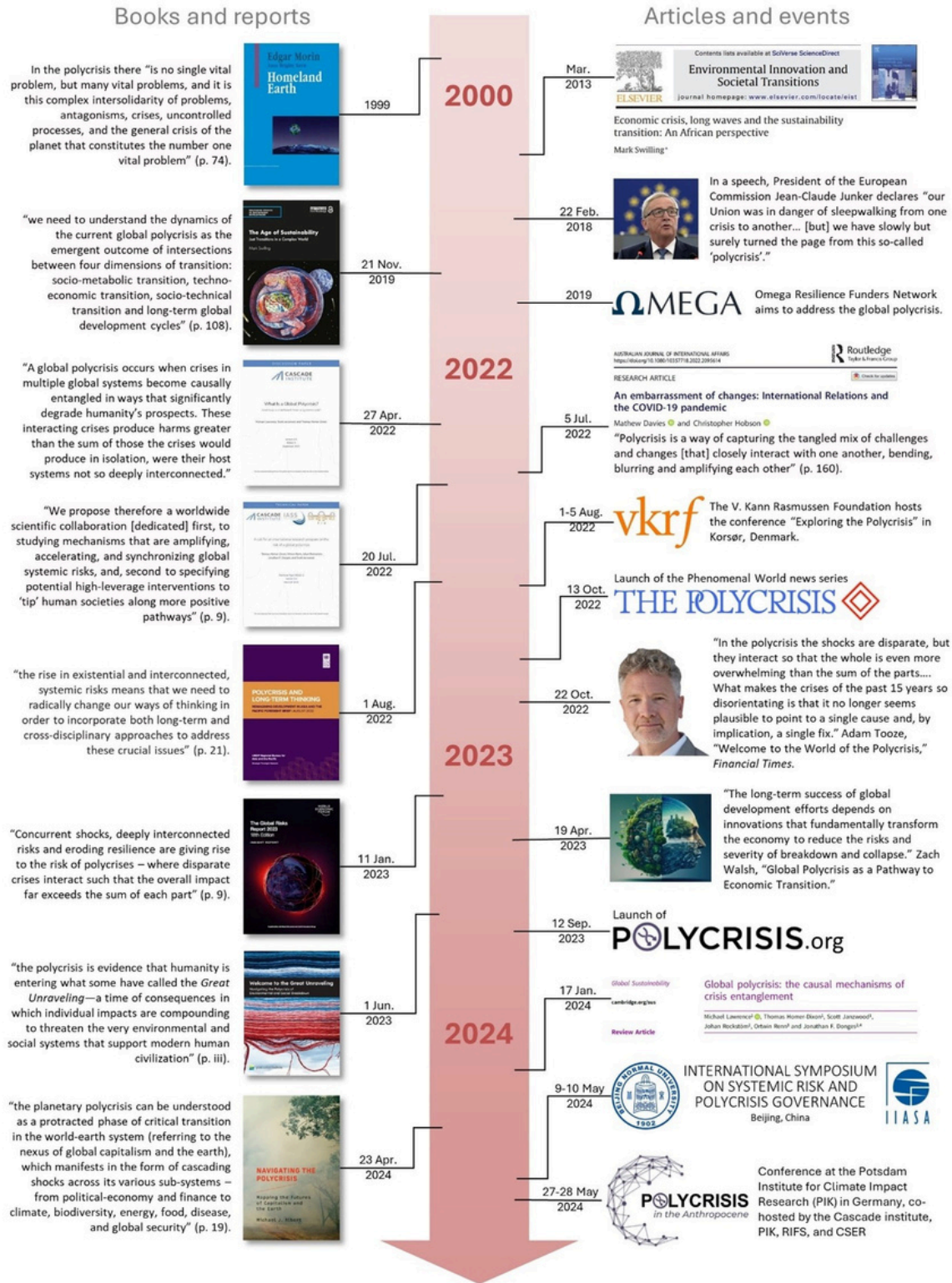
**Deep uncertainty:** The growing popularity of terms like “polycrisis,” “permacrisis,” and “metacrisis” shows we are struggling to understand the world’s many problems (e.g., Hobson, 2022a, 2022b; Davies & Hobson, 2022). Conventional concepts and theories offer scant purchase, so change is outpacing comprehension. The breakdown of shared meaning may, in fact, constitute a key aspect of our contemporary polycrisis. More generally, the emergent and complex nature of a polycrisis creates deep uncertainty about its ultimate directions and impacts. We face significant uncertainty, for example, as to how climatic conditions will evolve through continued anthropogenic forcings—especially if we pass key climate tipping points—and what those conditions will mean for food, geopolitical, economic, and governance systems.

**Systemic context:** As the three points above suggest, researchers often draw on complex systems science to better understand polycrises. (Indeed, the French philosopher, sociologist, and complexity thinker, Edgar Morin, was the first to introduce the polycrisis concept in his book with Anne Brigitte Kern in 1999.) Polycrises are fundamentally non-linear phenomena, driven by positive (self-amplifying) feedback loops and often exhibiting sudden flips or tipping events in key system behaviours. Unprecedented rates of energy use, resource consumption, and waste output combine with dense global connectivity arising from modern transport and communication technologies to raise the intensity of interaction between social systems and between social systems and ecosystems (Lawrence et al., 2024; Homer-Dixon, 2023). Because polycrises arise from the interconnections between systems, they require distinctly systemic responses.

**New knowledge and action:** The four points of agreement above add up to a fifth: the polycrisis phenomenon demands new ways of thinking and acting. Some critics of the term (e.g., Ferguson, 2023; Kluth, 2023) argue that it refers to nothing but a “mirage,” because nothing fundamental has changed in the world. So existing specialized and siloed knowledge and policy are enough to address humanity’s challenges. But intertwined, co-evolving, and self-reinforcing crises cannot be resolved separately. Their deep entanglement means they must be addressed together. Knowledge and practice must overcome silos and adopt a systemic approach that integrates disciplines and issue areas.

Even without a single definition of “polycrisis,” the above five points of agreement provide enough common ground to advance polycrisis research and practice, while maintaining the program’s diversity and flexibility. Careful efforts by polycrisis thinkers have transformed the term from a buzzword into a useful concept and created theoretical frameworks to guide empirical research. This agenda has significant implications for policy and practice, but it remains patchy and incomplete.

**Figure 2.** A brief timeline of polycrisis thinking





## 2. Gaps, opportunities, and priorities for polycrisis research and action

As a field of knowledge and practice, polycrisis analysis is still in its infancy. It features ongoing theoretical disagreements, wide-ranging yet under-exploited opportunities for research and action, and a nascent but rapidly growing community of researchers and practitioners. This section provides a snapshot of the field by summarizing key gaps, potential solutions, and priorities for theory building, research, practice, and community development.

### 2.1 Theoretical foundations

Despite the points of agreement listed in the Introduction regarding the polycrisis phenomenon's core features, several theoretical disagreements persist. Some issues require more focused theoretical attention.

#### **Crisis versus risk**

The conceptual distinction between crisis and risk—and, by extension, between polycrisis and systemic risk—remains contested. For some, risk entails the *potential* for harm, whereas crisis involves the activation of those potentials into realized events. There is, in this schema, a clear distinction between risk and crisis. For others, crisis entails a period of escalated risk, even if those risks do not materialize into actual events. This latter schema lacks a clear distinction between crisis and risk but better captures the way policymakers and everyday people think about crisis. For example, we call the Cuban Missile Crisis a “crisis,” even though the United States and the Soviet Union ultimately avoided a violent confrontation; it was a risk that thankfully went unrealized. But whereas risks can persist over very long periods of time, crises are generally thought to involve a temporally delimited break from normalcy. It is not clear if that break can endure over annual, decadal, or centurial (*longue durée*) timescales; at some point, the situation is better understood as normal.

#### **Several polycrises versus “the Polycrisis”**

For some, we live in a world of multiple *polycrises*, which can occur at any scale (from local to global) and have indeed recurred through history. Others use the locution “the Polycrisis” to refer to the present confluence of crises at the global (or planetary) scale as a singular, *sui generis*, and unprecedented phenomenon. And some see the Polycrisis as a looming, but not yet occurring situation, in which self-amplifying feedbacks among global crises activate tipping points and initiate an irreversible spiral into some sort of global societal collapse.

## **System structure versus power and agency**

Critics often say that polycrisis analysis overemphasizes system structure and thereby obscures the crucial role of human agency. Others say it neglects the deep-seated political conflicts and power struggles that contribute to global crises. These conflicts, as well as the powers used by actors participating in them, often arise from groups' and individuals' positions within system structures. The classic issue of structure and agency thus arises in polycrisis analysis, but it has found no more resolution here than elsewhere in the social sciences. Still, the field offers ample opportunity to better assess the roles of power and agency in creating, perpetuating, and transforming crises and the systems in which they occur. For example, we can advance polycrisis theory with a more nuanced assessment of how contemporary capitalism—including its class conflicts and intrinsic contradictions—contributes to global systemic stresses.

## **Nature of polycrisis interactions**

The polycrisis concept highlights causal interconnections between multiple crises, but our theoretical grasp of the nature of these connections—and hence of the mechanisms through which crises spread—remains weak. The polycrisis concept implies that the simultaneity of crises is not merely coincidental. But the extent and strength of causal entanglements among crises remains unclear. Minimally, the causal interactions among systems and crises are loose and eclectic; maximally, they are so dense and strong that the polycrisis can become a self-perpetuating system in itself.

These disagreements are unlikely to be resolved anytime soon, but they do not need to be. A variety of different approaches can expand and deepen polycrisis analysis and contribute to knowledge cumulation, as long as researchers articulate their position on these issues.

Analysts must also be sensitive to the ethics of knowledge production. The term “polycrisis” can be exploited as a political tool to emphasize the magnitude of global problems and the need for urgent, transformational change. But a small and privileged community often defines both the problems and the required transformations (see Section 2.4 on Community Building), while these circumstances are experienced unevenly across populations and geographies. Languages of crisis and risk imply that something of value is threatened. But what is threatened, and who values it, based on what underlying conceptions of well-being and justice? Whose problems are highlighted using crisis language, and who is served (or not served) by a crisis response? These issues concern every stage of knowledge production, from theory-building to practical application.

## 2.2 Empirical research

Many researchers have begun applying a polycrisis framework to empirical studies of intersecting crises in the past, present, and future, and from local to global scales. This preliminary work points to several key research priorities.

### **Specifying and bounding systems (time, space, sector)**

The notion that crises can spread between systems presumes that we can meaningfully delineate one system from another. But the boundaries of complex systems are difficult to establish, because these systems are open to outside influences and often overlap with each other. System boundaries should capture clusters of connectivity of higher density than the connections between a system and its external environment (i.e., other systems), but the relevant boundaries also depend on the purpose of the investigation. Empirical studies of polycrisis should clearly identify the systems and their boundaries that are involved in a polycrisis, including the spatial, temporal, and sectoral range of the analysis.

### **Constituent crises**

Researchers should also clearly identify which specific crises are interacting to produce a polycrisis and which systems those crises affect. There is no agreed upon list of the crises making up the present global polycrisis (or polycrises), but a number of global problems recur in researchers' accounts, including:

- climate change and Earth system tipping points;
- biodiversity loss and ecosystem collapse;
- zoonotic viral disease outbreaks, and specifically, the Covid-19 pandemic, including its long-term health and social impacts;
- resurgent violent conflict, both international and subnational, after decades of decline;
- geopolitical tensions associated with great power rivalries and hegemonic transition;
- rising populist authoritarianism and declining support for democratic institutions;
- food vulnerability, insecurity, price spikes, and shortages;
- turbulence arising from the fossil fuel transition;
- economic precarity, inflation, widening rich-poor gaps, and persistent public and private debt; and
- economic, political, and social impacts of artificial intelligence amidst growing dis-/mis-information and increasing cyber-security risks.

## **Crisis transmission**

Analysts need to better understand the causal pathways by which specific, real-world crises spread from their originating system to other systems, thereby expanding spatially and temporally with escalating effects. These mechanisms might involve crisis contagion after a high-impact initiating event (such as the Covid-19 pandemic) or cascading failures arising from the functional integration of different systems. A better understanding of these causal mechanisms will help analysts anticipate future polycrises and develop strategies for preventing or navigating them. This research priority relates directly to the theoretical gap on the nature and strength of crisis interactions noted in Section 2.1.

## **Methods and data**

To identify the constituent crises of polycrisis and chart how their impacts are transmitted among systems, researchers need appropriate methods and data. For example, if a crisis is thought to result from a systemic disequilibrium, then empirical methods must distinguish accurately between equilibrium and disequilibrium. Similarly, the methods and data researchers use to assess the roles of power and elites in causing a crisis will bear on what strategies they propose to resolve that crisis.

Across all domains of human knowledge, expertise remains largely siloed within the systems to which it pertains (economic, geopolitical, epidemiological and the like). Expertise and data availability too often dictate the methods used in research, and these constraints shape resulting policy recommendations. Uneven data availability and quality remain persistent challenges.

Researchers should experiment with and apply a broader range of system mapping and modelling methods, such as causal loop diagrams and cross-impact balance analysis, incorporating theory and data from multiple disciplines. They should identify all methods and mapping tools relevant to polycrisis analysis and better integrate these methods. Polycrisis analysis also needs formal models of crisis interaction and early-warning indicators of crisis emergence and escalation.

## **Past precedents**

Many commentators use the term polycrisis to highlight the unprecedented nature of today's interconnected crises, but others say similar situations have arisen before. Some critics even say no purported polycrisis, past or present, has been distinct enough from history's normal course to justify the neologism's use. Polycrisis researchers can address this challenge by

exploring historical instances of crisis entanglement and also by better illuminating the unprecedented nature of today's changes in Earth systems and global interconnectivity. Historical case studies might provide useful insights into the present polycrisis, but today's situation may ultimately prove so singular that they are largely irrelevant.

**Box 1.** International Symposium on Systemic Risk and Poly-crises Governance (Beijing, China)



On May 9 and 10, 2024, the International Institute for Applied Systems Analysis (IIASA) and Beijing Normal University co-hosted the conference *International Symposium on Systemic Risks and Poly-crises Governance* in Beijing, China. The event included 16 international participants along with 64 domestic participants representing more than 20 Chinese universities and research institutes. Its aimed to develop an integrated approach for the assessment and governance of systemic risk and polycrisis, one that highlights the interconnections among crisis domains and the conflicting interests and values implicated in crises. Such an approach requires institutional change to overcome policy silos, improve public communication, and encourage meaningful stakeholder participation in the development of responses.

Key thematic sessions focused on the changing nature of climate risk and the imperative of transformational change; methods and modelling of relevant case studies; the risks and opportunities created by demographic trends and urbanization; and implications for governance and policymaking. The event revealed significant consensus on the nature and characteristics of the systemic risks facing the world today and the necessity of more cooperative and integrated responses. Fortunately, the polycrisis has elicited a proliferation of conceptual frameworks and modelling tools that can support those responses, but there is an urgent need for more effective, resilient, and fair governance arrangements across multiple scales.

Contributions from the conference will feature in a special issue of the *International Journal of Disaster Risk Science* on “Systemic Risk and Polycrisis Governance.” Visit the conference webpage at: <https://iiasa.ac.at/events/may-2024/international-symposium-on-polycrises-and-systemic-risks>.

## 2.3 Practical applications

Members of the polycrisis research community (along with those in the broader community of systemic risk assessment) often bemoan the chasm separating polycrisis research and analysis and the actors actively navigating intersecting systemic crises. The polycrisis community wants to help policymakers and other frontline actors prevent and respond to urgent, intersecting crises, but several challenges impede its efforts to bridge this chasm.

### **The negativity problem**

Polycrisis analysis offers novel insights on the complex and systemic nature of the world's intersecting problems, but its findings are generally bleak. Many community members are concerned that this fixation on negative outcomes shrinks the potential audience open to polycrisis research findings and recommendations. On the one hand, the polycrisis field must help leaders in government and the private sector to better understand the systemic nature of problems, including their depth and complexity. On the other hand, polycrisis analysis should also present “positive pathways”—actions that could help prevent, mitigate, or navigate through polycrisis towards more desirable futures (Lawrence & Shipman, 2024). A better balance between positive and negative messaging might boost receptivity to polycrisis analysis. Communications and public relations experts could help polycrisis analysts frame their research in ways that reduce the negativity problem.

### **Research co-development**

To date, academic researchers and think tanks have dominated the polycrisis discussion, and they have largely excluded policymakers and other frontline actors from the research process. But polycrisis analysis is an explicitly *applied* field whose members are committed to advancing knowledge *and action*. To achieve the latter goal, the polycrisis community should deepen its relationships with policymaking, financial, and philanthropic organizations to incorporate practical experience and insights into research design and to more widely communicate research findings. The perspectives and priorities of actors contending with polycrisis should shape polycrisis projects. Practitioners can co-develop research with polycrisis analysts by shaping objectives, contributing data, participating in system mapping, and helping researchers tailor their analyses—and the resulting recommendations—to specific audiences and organizational contexts. As a first step, the polycrisis community should identify “champions” (such as foresight and horizon-scanning units) within public and private organizations who are receptive to polycrisis analysis and eager to collaborate.

## **The governance gulf**

As research on global systemic crises and their interactions has advanced, it has become increasingly apparent that the response capacities of governance institutions are evermore incommensurate with these crises' complexity, scope, and pace. Polycrisis community members highlight the current lack of practical, context-specific recommendations for governance, specifically advice on how organizations should be structured and mobilized to respond effectively. New research that brings together experts in complex organizational design, governance, and public administration with experts in polycrisis analysis could address this gap. This research should particularly address the current crisis of institutional legitimacy that governments and other public-facing organizations confront.

If members of the public think a governance actor's decision-making process is illegitimate and unfair, they are unlikely to support implementation of the actor's proposed responses to polycrisis. To boost government legitimacy—and increase the prospects of implementation and success—polycrisis analysis supporting these organizations' decisions should include diverse perspectives, use participatory methods where applicable, and communicate results as transparently as possible. If people do not see the process as valid, they probably will not support its results.

## **Inclusive and participatory methods**

Polycrisis analysis tends to be expert-driven and often excludes key voices—not only the voices of policymakers and frontline actors but also of actors from the Global South (see Section 2.4 on Community Building). As a general rule, polycrisis analysis must use methods that are “fit-for-purpose”—that is, they should align with the nature of the research questions, available data, and the target audience's conventions and preferences. So, while expert-driven analyses using advanced methods and models are often appropriate, to produce fair and effective responses, researchers will sometimes have to use inclusive and participatory methods that reflect the values, interests, and politics of the communities involved. Participatory research methods are particularly important when researchers explore possibilities for system transformation—that is, pathways from an undesirable to a desirable system state—because those explorations centrally concern people's visions of better futures.

## **Incentives for applied research**

Many members of the polycrisis community are professors and postdoctoral fellows at universities, and universities generally do not offer strong financial and institutional incentives to generate applied research that emphasizes co-development and real-world impact. Although new non-profit organizations and think tanks are emerging outside academia, they are often hamstrung, because most funding sources still favour incremental research pursued within established disciplinary boundaries and published in peer-reviewed journals. But journal paywalls exclude people from crucial discussions. The polycrisis community should therefore seek new sources of funding to create positions and organizations focused on applied polycrisis research and knowledge mobilization.

## 2.4 Community building

There is now a small but growing community centred on polycrisis research and action. Nurturing and expanding this community requires a stronger group identity, greater financial and intellectual support for members, and further expansion of the community beyond academia and the Global North.

### **A well-defined (yet inclusive) community identity**

The polycrisis field's community identity—that is, who is in the field, what it stands for, what topics and activities are “in scope” and “out of scope”—is fluid and unresolved. Researchers and practitioners with relevant expertise have expressed uncertainty about whether they are a part of this community and, if so, what that means. Disciplinary and departmental boundaries, hiring and tenure processes, publishing opportunities, and grant sources all reinforce institutional and epistemic silos that entrench and reinforce conventional researcher identities in traditional academic fields. Early-career researchers are particularly susceptible to these dynamics.

Multi-disciplinary webinars, “primers,” and practical toolkits will promote polycrisis literacy—the concepts, language, and tools that define the field—and help forge a clearer community identity. But this identity should be open, pluralistic, and inclusive, while also promoting common understanding and cooperation. Members can strike this balance by articulating clear principles defining the polycrisis field. A worthwhile identity for the polycrisis community must offer something beyond those of existing communities organized around systemic risk. A statement of principles should articulate the community's value—as well as its values.



## Box 2. Polycrisis in the Anthropocene (Potsdam, Germany)



On May 27 and 28, 2024, the Cascade Institute, the Potsdam Institute for Climate Impact Research (PIK), the Research Institute for Sustainability - Helmholtz Centre Potsdam (RIFS), and the Centre for the Study of Existential Risk (CSER) co-hosted the *Polycrisis in the Anthropocene* conference at PIK in Potsdam, Germany. The event brought together leading polycrisis thinkers and practitioners from Brazil, China, India, Kenya, and South Africa, as well as Europe and North America, to examine the present state, key challenges, and future directions of the polycrisis field.

A series of paper panels examined, critiqued, and refined draft contributions to an upcoming special issue of *Global Sustainability* entitled “Polycrisis in the Anthropocene.” The first panel explored different understandings of polycrisis, their relationship to similar concepts, and key conditions of crisis spread. The second panel examined the key political conflicts driving polycrises past and present, and the role of power in these processes, alongside opportunities for agency in policy responses. A third panel considered practical responses to polycrisis, ranging from adaptive governance and degrowth through “eco-mirroring” to the opportunities and constraints created by present-day actions for a post-polycrisis future.

The conference also included open discussions of key issues in the polycrisis field, including climate change as a driver of polycrisis, the role of inequalities between the Global North and South, and the resurgence of violent conflicts. Focused discussions considered the institutions, policies, and practices required to contend with polycrisis; the key gaps in polycrisis knowledge; strategies for building a larger and more inclusive polycrisis community; and the insights participants would like to bring to the United Nations Summit of the Future in September 2024. This conference provided the primary inputs for the present report (which is coauthored by the organizers of that conference), supplemented by outcomes from other events (such as the International Symposium on Systemic Risk and Poly-Crises Governance, described above) and a survey of the polycrisis literature.

## **Geographical representation and inclusion of diverse perspectives**

While the polycrisis community is inherently interdisciplinary, it does not currently reflect well the perspectives of people experiencing the acute impacts of polycrisis. A community building strategy should identify which groups, disciplines, and demographics are under-represented in a field where Western concepts, Northern experiences, and academic perspectives dominate.

People experience polycrisis in very different and unequal ways depending on their location, gender, ethnic identity, culture, and socio-economic status, so they understand and navigate the situation using different types of knowledge. Their diverse experience could point to strategies for system innovation and adaptation. Although “polycrisis” is not inherently a Northern concept, the field urgently needs more participation from experts and practitioners in the Global South, especially since people there experience the most severe consequences of interacting crises. The research community could expand by identifying and supporting “champion” organizations in the Global South to provide new perspectives and capabilities; also, joint funding proposals are good vehicles to actively recruit and support collaborators in the Global South. But building the requisite trust and relationships will take time and patience on all parties’ part.

The existing community should actively welcome other groups, too, such as philosophers to illuminate the ethical implications of polycrisis; artists to develop new ways of imagining alternative futures; and youth, because the global polycrisis affects their futures most deeply.

## **Public outreach**

To date the field has focused on informing policymakers and other frontline actors. But many community members want to engage the general public more actively to create broader awareness of key research findings; this knowledge should aid both people’s understanding of the world’s problems and their search for locally contextualized solutions. Any outreach effort will need to address, of course, the “negativity problem” discussed in Section 2.3. But the polycrisis community can make headway by investing more resources in social media communications strategies; accessible documents and media; youth involvement; and opinion articles in major outlets.

## Core community infrastructure and leadership

Better organizational infrastructure creates more vigorous communities. Ideally, a core group of polycrisis community members—one representing diverse organizations, regions, and perspectives—will come together to coordinate outreach, meetings, and collaboration. Some of this work is already underway. The communication and collaboration platform [polycrisis.org](https://polycrisis.org) allows interested people to access the latest polycrisis research and learn about upcoming events. The site could be expanded to allow researchers to share job postings, request feedback on their work, and connect with other polycrisis experts across the global community.

Other infrastructure investments that will build community include:

- organizing annual or bi-annual meetings (such as the recent conferences in Beijing and Potsdam) where community members present their research, identify key priorities and opportunities for the field, and forge new partnerships;
- creating more opportunities to publish inter-disciplinary, action-oriented research (such as the forthcoming special issue of *Global Sustainability* on “Polycrisis in the Anthropocene”; or the *International Journal of Disaster Risk Science* on “Systemic Risk and Polycrisis Governance”); and
- funding polycrisis research positions, including doctoral and post-doctoral positions and visiting fellowships, to support more diverse participation in events, advance projects on priority topics, channel opportunities to the Global South, and conduct outreach to broaden the polycrisis community.

# 3. Conclusion: Accelerating polycrisis research and action

To close the gaps highlighted in Section 2, the growing network of polycrisis organizations, researchers, and practitioners should exploit the field’s current momentum. Boosting core community infrastructure (a core recommendation in Section 2.4) is a “meta-solution” that would unlock and accelerate additional solutions to the field’s current theoretical, empirical, practical, and community-building challenges. The tables below summarize these gaps and solutions.

**Theoretical foundations**

Gaps and challenges	Solutions
<p>Disagreement about the definitions of core concepts (crisis vs. risk, polycrises vs. “the Polycrisis”)</p>	<ul style="list-style-type: none"> <li>• Avoid getting bogged down in efforts to standardize/harmonize concepts and definitions.</li> <li>• Establish norms for clearly defining key concepts in published work and presentations.</li> </ul>
<p>Weak theory on the role of system structure, power, and agency in shaping polycrisis and polycrisis response</p>	<ul style="list-style-type: none"> <li>• Encourage interdisciplinary sociologists, political scientists, and other “systems theorists” to pursue this research program (through, for example, calls for research, positions, and funding).</li> </ul>
<p>Lack of precision about how crises spread (specifically, the strength and character of polycrisis interactions)</p>	<ul style="list-style-type: none"> <li>• Encourage interdisciplinary “systems theorists” to prioritize this research program (through, for example, calls for research, positions, and funding).</li> </ul>



## Empirical research

Gaps and challenges	Solutions
System boundaries and “constituent” crises are difficult to define	<ul style="list-style-type: none"> <li>• Acknowledge the inherent inter-subjectivity and imprecision of definitions of system boundaries.</li> <li>• Clearly identify systems, their boundaries, and constituent crises when analyzing polycrisis.</li> </ul>
Lack of real-world case studies of “crisis transmission mechanisms”	<ul style="list-style-type: none"> <li>• Encourage interdisciplinary teams of “systems theorists” and domain-specific experts to pursue this research program (through, for example, calls for research, positions, funding).</li> </ul>
Lack of clear guidance on method selection	<ul style="list-style-type: none"> <li>• Initiate new research on polycrisis-relevant methods and how they can be combined/integrated.</li> </ul>
Uneven data availability and quality	<ul style="list-style-type: none"> <li>• Identify and share appropriate databases across disciplines and develop recommendations for improved data collection and integration.</li> </ul>
Lack of clarity on the relevance of historical case studies for analyzing unfolding crisis interactions	<ul style="list-style-type: none"> <li>• Encourage interdisciplinary teams of “systems theorists” and historians to pursue this research program (through, for example, calls for research, positions, funding).</li> </ul>

## Practical applications

Gaps and challenges	Solutions
<p>Polycrisis research and analysis fixates on negative outcomes, limiting its audience and potential impact.</p>	<ul style="list-style-type: none"> <li>• Make a concerted effort to identify positive pathways in polycrisis analyses.</li> <li>• Engage communications experts to identify strategies to better frame polycrisis analysis for policymakers.</li> </ul>
<p>Policymakers and “frontline actors” are excluded from the research process.</p>	<ul style="list-style-type: none"> <li>• Identify and develop relationships with “champions” in policymaking organizations and integrate their expertise and priorities into the development of research projects.</li> <li>• Learn from existing models to build formal relationships/affiliations with policymaking organizations (and other key organizations) and established intermediaries bridging government and civil society/academia.</li> </ul>
<p>Polycrisis analysis tends to be expert-driven and exclusionary.</p>	<ul style="list-style-type: none"> <li>• Experiment with participatory systems mapping tools—particularly those already used within government and the investment community.</li> </ul>
<p>Polycrisis researchers are discouraged from producing applied research focusing on co-development and real-world impact.</p>	<ul style="list-style-type: none"> <li>• Pursue funding for new positions and organizations focused on applied polycrisis research and knowledge mobilization.</li> </ul>

## Community building

Gaps and challenges	Solutions
Lack of a well-defined polycrisis community identity	<ul style="list-style-type: none"> <li>• Develop a “uniting document” outlining the scope, objectives, and principles of the community.</li> <li>• Develop multidisciplinary webinars, primers, and practical tools.</li> </ul>
Underrepresentation of the Global South and lack of diverse perspectives	<ul style="list-style-type: none"> <li>• Map the geographical distribution and intellectual/disciplinary approaches of polycrisis community.</li> <li>• Identify “champion organizations” in the Global South.</li> <li>• Partner with champion organizations to pursue funding opportunities.</li> <li>• Actively recruit researchers from underrepresented groups to the community.</li> <li>• Encourage interdisciplinary polycrisis research (in the form of grants, positions, support) for early career academics.</li> </ul>
Low “polycrisis literacy” outside of the polycrisis community	<ul style="list-style-type: none"> <li>• Increase general public outreach (through, for example, social media communications strategies, accessible “explainers,” op-eds in major outlets).</li> </ul>
Lack of dedicated community infrastructure and leadership	<ul style="list-style-type: none"> <li>• Add elements to polycrisis.org (e.g., a board where members can seek advice, collaboration, job opportunities).</li> <li>• Distribute newsletter to keep community updated on upcoming events and member accomplishments/publications.</li> <li>• Seek out publishing opportunities like special issues in journals or create a new journal.</li> <li>• Host an annual or semi-annual meeting.</li> <li>• Establish a pool of money that can be distributed for opportunities within the network.</li> <li>• Create a polycrisis “banner” under the auspices of the Accelerator of Systemic Risk Assessment or get founding institutions to take leadership responsibility.</li> <li>• Hire, elect, or assign community members to be responsible for planning meetings and conferences, maintaining communication channels, and coordinating fundraising efforts.</li> </ul>



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