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# POLYCRISIS EXPLORATION WORKSHOP

A guide for facilitators

Joint  
Research  
Centre



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# Polycrisis exploration workshop

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# Navigating a complex risk landscape

## A strategic workshop

### Executive summary:

The Polycrisis Exploration Workshop<sup>1</sup> facilitates strategic conversations about current and future risks, disasters, and polycrises. It is based on the foresight study 'Risks on the horizon'<sup>1</sup>. This guidance document provides detailed instructions on how to run a workshop, and how to use the insights in policy making.

Risk is ever present. Risk events, i.e. disasters and crises, are growing more extreme and are increasingly interconnected. The cascading and compounding impacts can be the most severe. Many risks have the potential to develop into 'global shocks'. At the same time as critical choices are being made (regarding geopolitical, environmental, and disruptive technologies for example). Navigating and assessing risks when making strategic policy decisions, and planning for a resilient long-term future, is becoming more complex.

### This tool can be used to:

- 1. Enhance risk awareness by exploring the broad spectrum of risks.**  
Build awareness of other actors' perspectives.
- 2. Map potential future polycrises and explore interconnected and cascading impacts.** Investigate how they might affect your policy area.
- 3. Identify policy interventions to mitigate risks and disasters, and to support policy goals.** Think about where risk comes from, and which drivers could make a disaster more extreme in the longer-term future. Identify interventions for today, and the people who need to be involved in planning.

Collective intelligence exercises such as this can bring new knowledge and broader perspectives into policy making, sparking new ideas, and helping to co-create impactful interdisciplinary solutions. They complement traditional risk assessment methods.

<sup>1</sup> Muench, S., Whyte, J., Hauer, G., De Maleville, A. and Asikainen, T., 2024. [Risks on the horizon](#)

# Polycrisis exploration workshop

## Concept and what to expect

Risks and polycrises are broad and complex. Different groups have different interests and goals for engaging with risks and polycrises. A 3-step workshop method to support strategic thinking, manage complexity, and ensure accessibility has been developed. To ensure a useful dialogue and maximise outputs, whilst balancing ambition with the reality of what foresight workshop can deliver, this format offers choices.

### ACTIVITY 1:

**Enhance risk awareness by exploring the broad spectrum of risks**

### ACTIVITY 2:

**Map future potential polycrises and explore interconnected (cascading) impacts**

### ACTIVITY 3:

**Identify policy interventions to mitigate disasters and support policy goals**

## Customise Your Workshop:

It is recommended that you **do all three activities** for more purposeful work and advise to **take enough time** to do the exercises. Allow space for participants to engage in discussions that foster more conclusive, operational outputs.

- **The three activities take approximately 4.5 hours to run, with no breaks.**

You could choose to do all three activities over a comfortable six hours, allowing for two coffee breaks, and a networking lunch. In this format you can run your workshop over the course of one day (for e.g. 10am - 4pm, also allowing for travel).

- You could compress the timing of each activity or have fewer breaks for a shorter workshop. Or you could select only two activities (in this case, for example, skip activity one and choose risks in advance). Or you could spread the three activities over a few days.

**The decision on where to use your time and effort is based on the nature of your interest in risks, and your specific goals. Be realistic about time and objectives** and customise the agenda accordingly. Here are some questions to help you decide:

- If you want to discuss risks more in depth, explore assumptions and perspectives on them - include **ACTIVITY 1**.
- Are you mainly interested in polycrises and the interconnectedness of cascading impacts - prioritise **ACTIVITY 2**.
- Do you want to identify core drivers of crises, and developments that might make crises more extreme in the future? Do you want to identify early intervention points that could reduce negative future impacts on your policy objectives - prioritise **ACTIVITY 3**.

# Key considerations



- This workshop is not a prediction tool, nor a traditional risk assessment exercise, nor a risk management plan. It is not meant to replace those methodologies, but rather **to complement them**.
- It is designed to help **spark new ideas to take forward** in risk management and **foster a holistic understanding** of risks and polycrises. The workshop can be a starting point for a longer, more comprehensive foresight project.
- **Risks can be broad and complex**. The purpose of this tool is to make complex subject matter accessible, and to help manage the complexity of a system. Systems thinking requires new ways of working and zooming out. There is a need for both deep, and holistic analysis.
- **Think carefully about your participants** and when forming subgroups. Expertise in risks or polycrises is not required. **Different types of participants**, and experts in particular areas can bring useful perspectives and insights.
- **Allow sufficient time for preparation, and for processing outputs**.
- **Facilitators should be experienced in facilitation** and trained in advance. A detailed choreography is provided, adjust it for your workshop, and have it in hand during the workshop. All the instructions needed are described below. Posters and 40 cards with risk summaries and illustrations for the workshop are available for download and to be ordered.
- Outputs will not provide a full solution, but will foster common understanding, and novel thinking, sparking novel 'out-of-the-box' ideas to take forward and **help prepare for possible future risks and crises**.

# Introduction

## Enhancing preparedness through risk assessment and foresight

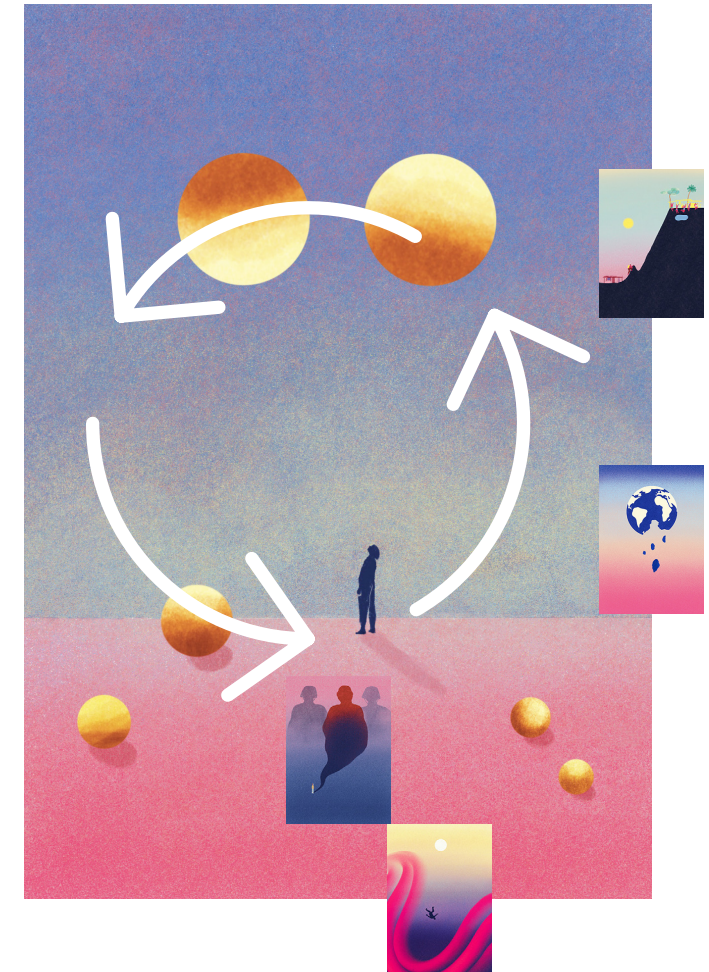
Risks and the disasters happening in the world today are growing more extreme and are increasingly interconnected<sup>2</sup>. Many risks have the potential to develop into global shocks, and their cascading impacts can be the most severe<sup>3</sup>. Assessing risks when making strategic policy decisions and planning for the long-term is becoming more difficult<sup>4</sup>. To address this, merged foresight and systems thinking with risk assessment in Polycrisis Exploration Workshop provides an overview.

**The goal of the workshop tool is to enhance shared understanding of the different types of interconnected risks, it also helps build resilience, and help policy makers to prepare for potential future disasters and their cascading effects, as part of preparedness efforts.**

Risk can be defined as 'the possibility of an undesired effect associated with an event, should it happen'<sup>5,6</sup>. Risk assessment methods include identifying and analysing events which may cause harm. The impact of any risk event, disaster, or crisis depends on its context, exposure, vulnerability, and resilience factors. Risk events (disasters) can be a surprise, and they do not happen in isolation. Due to the increasingly interconnected, interdependent risks, that happen at the same time, we should not look separately at forces driving change<sup>3</sup>. We should not focus on only one aspect of a system. Nor should we ignore the highly uncertain, or understudied risks. These can be blind spots in planning exercises. Foresight methods can be used to understand change, and to find strategic ways to influence developments and navigate towards possible futures.

**Polycrisis refers to a complex and interconnected set of crises that occur simultaneously, often exacerbating and influencing one another.**

The term describes a situation where multiple, severe challenges or crises converge, creating a highly unstable and volatile environment. It is important not to underestimate the impact or speed of developments that will have a long-term impact.



<sup>2</sup> Corbane, C. et al., 2024. Cross-border and emerging risks in Europe

<sup>3</sup> Homer-Dixon, T., O. Renn, J. Rockström, J. Donges, and S. Janzwood, 2022. A call for an international research program on the risk of a global polycrisis. Technical paper #2022-3

<sup>4</sup> WEF, 2024. Global Risks Report

<sup>5</sup> Renn, O., 2008. Concepts of Risk: An Interdisciplinary Review Part 1: Disciplinary Risk Concepts, GAIA - Ecological Perspectives for Science and Society 17, 50–66

<sup>6</sup> The authors recognise the many nuanced definitions of risks. We are interested in current and future risks and threats for the EU (emerging, current, future, systemic, extreme threats, and so on). While there is a range of levels of knowledge about them, and uncertainty as how they could develop, each could have a significant negative impact should it occur, and even worse should several occur at the same time.



# Introduction (continued)

Existential risks (those that might end humanity), extreme threats, and polycrises are increasingly calling for **“a new mindset to preparedness”** by different organisations in response to the evolving and cascading crises and threats<sup>7,8,9,10</sup>.

**Understanding the complexity of risks, including possible compounding, cascading and systemic effects, is a key step in reducing and managing disaster risks, as recognised in the Sendai Framework for Disaster Risk Reduction<sup>11</sup>.**

The workshop uses 40 risks grouped into 10 risk clusters and mapped 44 drivers (development pathways). This tool takes those 40 risks as a foundation to explore the current and emerging systemic risk landscape - **making the foresight product actionable and strengthening the connection with preparedness work** (see the Preparatory Reading document for a description of the 40 risks).

Many of the risks listed are complex, contain a lot of uncertainty, and will develop in different directions in the long-term. To fully understand these risks and options for their mitigation today is an ambitious endeavour. This tool aims to meet part of this need, bringing together the relevant actors in a workshop to take note of the shifting risk landscape in structured discussions about the risks and possibilities, and futures, and to plan what to do. It puts the spotlight on understudied risks and drivers, which could present challenges for policy actions, whilst also further driving risks. Being aware of all of this allows policy makers to monitor and address complex risks with interdisciplinary solutions. It offers a way to explore cascading impacts and identify interventions.

**It can enable early intervention strategies allowing participants to adapt their thinking and planning to a range of possible futures, and steer towards opportunities.** Collective intelligence exercises allow an examination of things not usually on policy makers, or risk managers radar. The workshop tool can be used in a participatory preparedness exercises to explore the potential impact of risks and future risks on policy goals, and support strategic decision-making.



<sup>7</sup> Niinisto, S., 2024. Safer together. Strengthening Europe's civilian and military preparedness and readiness

<sup>8</sup> UK Government, 2023. National risks register 2023 edition

<sup>9</sup> Lawrence, M., Shipman, M., Homer-Dixon, T., 2024. Introduction to polycrisis analysis. A guide to the Cascade Institute's approach

<sup>10</sup> OECD, 2011. Future Global Shocks: Improving Risk Governance, OECD Reviews of Risk Management Policies

<sup>11</sup> UNDRR, 2015. Sendai framework for disaster risk reduction 2015-2030



# Workshop goals and the three activities

The main goal of the workshop is to help participants broaden their thinking about the range, origin, and drivers of future risks. Think about different perspectives, check and challenge assumptions. Start to prepare for longer-term future policy needs (for example data, training, funding, scientific cooperation), and actions (policy instruments or targeted research programs). All these outputs can feed into planning for further work in a longer, more comprehensive foresight project if needed. Specifically, the workshop aims to:

## **ENHANCE RISK AWARENESS:**

Examining potential future risks and encouraging thinking beyond conventional risk lists.

## **MAP FUTURE POLYCRISES:**

Foster strategic thinking about long-term implications of risks, and their inter-connectedness.

## **IDENTIFY POLICY INTERVENTIONS:**

Address drivers of future risks and build resilient policies as part of preparedness planning.

This foresight exercise is intended as a complement to traditional risk assessment exercises, and to broaden thinking beyond single hazards. It aims to analyse risks in the context of complex and interlinked trends, and combined impacts. It can cultivate a proactive mindset and cognitive flexibility among decision makers. Collective intelligence exercises foster out-of-the-box thinking and provide a safe space that allows an examination of issues not usually on policy makers or risk managers radar. This type of participatory work can improve crisis management capacities and help ensure a coordinated and integrated policy approach. Increasing the preparedness of policy makers to deal with extreme threats, future risks and polycrises supports their decision making today to be better prepared for the future.



# The workshop process

Send the "Polycrisis Exploration workshop preparatory reading" to the participants in advance of the workshop.

## Activity 1: Enhance risk awareness by exploring the broad spectrum of risks

During this exercise participants (in groups) will review and discuss the 40 future risks identified in the study 'Risks on the Horizon'. Try to ensure diverse background and expertise within each group. They start to think about which of the risks would be most insightful for a discussion, in the context of their policy goals. They will be asked to consider and discuss how aware they are of the potential impact of this risk (from each person's own perspective).

Is there uncertainty or certainty with regards to how this risk might develop? Could it potentially shape the future in a radical way? Is there a lot of knowledge about how the risk could affect the chosen policy area? Is it already being studied, and are there preparedness plans in place?

This activity **(coupled with participants reading the preparatory reading document in advance)** offers a short and an efficient way to start to discuss many risks as a group, and to help identify relevant risks.

Perspectives on risks are widely different. A benefit of this exercise is hearing other points of view. Exploring attitudes, values, current assumptions, concerns, alongside priorities within a policy domain, can be very insightful to better understand partners and stakeholders perspectives. Follow the guiding questions in the workshop choreography steps below.



Approx - 60 min

**YOU WILL NEED :**



**Timer**  
15-30-60 min



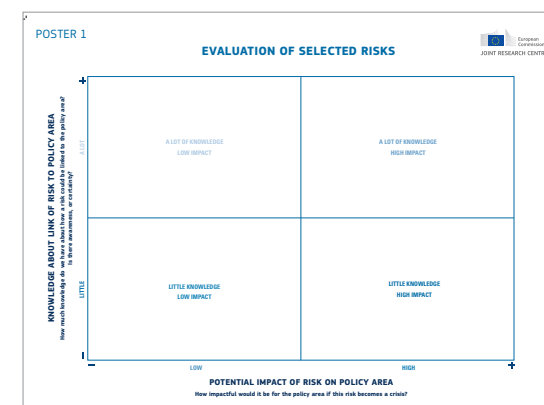
**Groups of**  
6/8 Participants



**Set of**  
40 Risk Cards



**Intro Powerpoint**  
to policy area



**A0 POSTER 1**  
(to put on a table)

## Activity 1: Enhance risk awareness by exploring the broad spectrum of risks, (continued)

### Theory box:

On **POSTER 1 for Activity 1**, there are some choices to be made with regards to which risks you will prioritise and explore further in your workshop<sup>12</sup>. Each group will have chosen a selection of risks of their interest. They will be placed on **POSTER 1** and assessed on two scales. On horizontal axis on how impactful would it be for the policy area if the risks becomes a crisis. On vertical axis how much knowledge is known about how the risk can be linked to the policy area. Think about how the exercise could help participants to look outside of their 'comfort zones'. As a facilitator, you can play a steering role to orchestrate workshop discussions and choice of risks to take to **Activity 2** (for deeper discussions). For example, you could choose to focus on the risks the team are interested in, even if they know quite a lot about them - if that is what your team needs to do. **Or you could steer participants towards potentially high impact, highly uncertain risks - of which there is little knowledge (lower right part of the graph on POSTER 1). You do this because it might be a blind spot that is not being looked at yet that surprises everyone later. This is where foresight tries to shine a light.** This is why the poster quadrants are laid out in the way they<sup>13</sup>.

There is a need to be aware of these types of risks, to examine where they come from, and how they might affect policies and/or reinforce disasters. Extreme threats, existential threats, polycrises, future risks, disasters - there is a lot of terminology in this field that ranges from dealing with accidents to dealing with 'unknown futures'<sup>14</sup>. In this analysis, we refer to risks for, and in the future, that might have a negative outcome. Many are manageable if they would happen on their own, but that is unlikely, and in times of polycrises they could become globally catastrophic (threatening human well-being on a global scale), or even existential crises (threatening humanity).

Attributes of extreme threats and polycrises include their surprise (lack of early warning), unprecedented intensity, extreme spread, speed to spread, lack of knowledge, lack of awareness, uncertainty (unknowns), alongside impacts amplified by the context, i.e. by lack of preparedness, perception biases or inadequate communication.

**Risks that emerge slowly over a longer timeframe, or which have a low likelihood of occurring are often overlooked other priorities and lack or resources to assess all risks.** There is often little knowledge, or a lot of uncertainty in how things may develop, or if it will happen. Policy makers need to be prepared regardless because those certain risks can be the most important ones to focus on.

<sup>12</sup> Whyte, J., and Knutti, M., 2024. Similar approach used in [Megatrends Assessment Tool: An exploratory workshop](#)

<sup>13</sup> Schultz, W., 2015. Manoa: [The future is not binary](#)

<sup>14</sup> Schanz, K-U., et al., 2023. [The Value of Insurance in a Changing Risk Landscape](#).

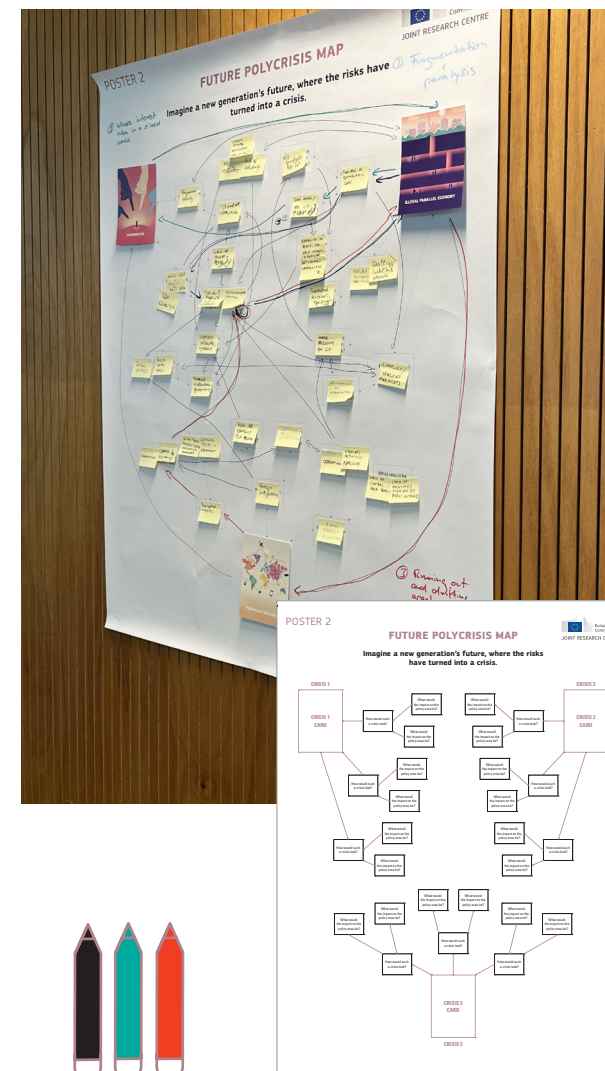


# The workshop process

## Activity 2: Map future potential polycrises and explore interconnected (cascading) impacts

In **Activity 2**, participants will **'travel to the future'** with a selected number of risks to explore the potential consequences of them happening. Encourage participants to imagine a longer-term future, for example how the crisis could hit a new generation for example in 20 years. It is useful to try to imagine an extreme disaster, without being overly dramatic. The main ways in which the crisis manifests (i.e. the **impacts**, or the main things that happen) are mapped in this activity. You can then explore impacts **on and implications for your specific policy area**, draw **connections** between the effects, and examine relationships among them (for example the direction of the impact). **Cascading effects** (consecutive knock-on effects, or simultaneous effects) can be brainstormed too.

This part of the workshop is conducted that the three chosen risk are placed on **POSTER 2** (see picture to right). For each risk at least three impacts on how a such crisis would look like is explored. For each to the risks, most cases, participants will identify (and name) several interesting impactful polycrises outcomes on each **POSTER 2**, either **hotspots or causal loops**. As you brainstorm how a potential future crisis could look, and draw connections, pay attention to the interconnectedness of the impacts, and the causal relationships by which one impact influences, or intensifies another. These can be the interesting spots where a lot of activity is happening, and potentially reinforcing the original crisis. This is why the last step of **Activity 2** looks for 'causal loops'. **'Hotspots'**, i.e. impacts with a lot of connections, are also interesting to explore. Give a name to the interesting outcomes on each **POSTER 2** and select one to examine further in **Activity 3**.



Approx - 90 min

YOU WILL NEED :



Timer  
15-60-90 min



Same groups as  
activity 1



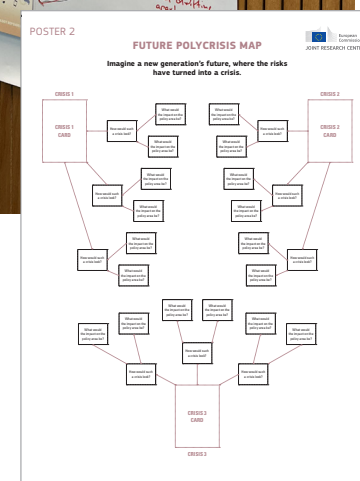
Set of  
3 chosen Risk cards



Stickers  
(Post-it )



Pens  
(3 different colors )



A0 POSTER 2  
(to put on a wall)

## Activity 2: Map future potential polycrises and explore interconnected (cascading) impacts, (continued)

### Theory box:

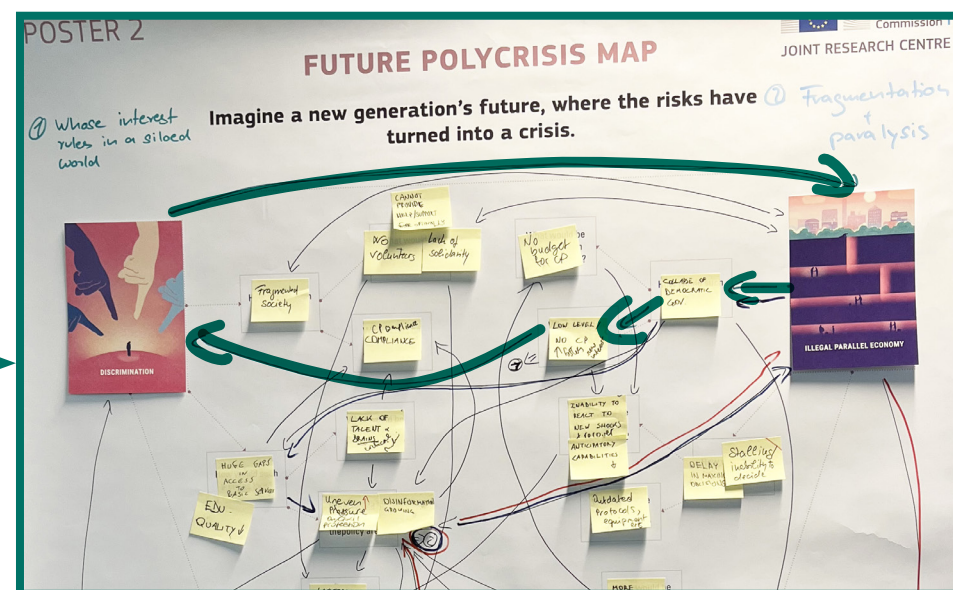
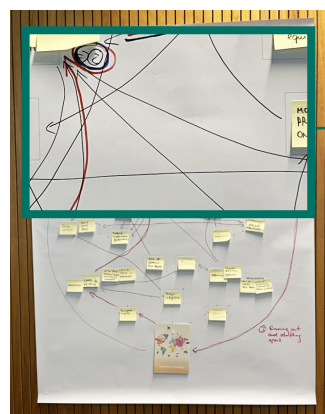
In **Activity 2**, you will not not solely focus on one risk. The goal is to **focus on the linked and overlapping impacts** and how they could impact your policy area. Risks and disaster impacts should not be studied in isolation. As a result of connections and interdependencies, the consequences of disaster impacts **can create cascading impacts throughout systems**.

Go beyond the geographical region that was originally affected - think of cross border threats, climate threats, or financial crisis. As facilitator, ask “what effects or changes would this crisis lead to in the world and then “in your policy system”. On **POSTER 2** focus on the negative impacts and main ideas as described in the detailed choreography on pages 21-22.

More detailed analyses could include positive and negative impacts, and a quantification of the degree of influence. You will find additional ways to analyse the results on your posters post-workshop in the Reporting Template. If you have more time, you could add additional questions here, such as: Is the initial event more damaging, or are the cascading effects more important? What if 2 events happen at the same time, what would that look like?

**Causal loops** and diagrams (also known as system thinking diagrams) are useful to map cause and effects within a system<sup>15</sup>. They can be self-reinforcing and therefore important to intervene and break. The selection and prioritisation of causal loops will become a main way to gain some policy insights within this workshop's limited timeframe. As facilitator, you may want to remind participants that certain causal loops might be more critical for increasing preparedness for unexpected future risks than others. Although causal loops are constructed from the hypothesising of potential future events, there could be an inclination among participants to favour loops that resonate with current trends. As facilitator, you could try to encourage the discussion about events that might affect the society. This way, they will take advantage of the foresight approach of the tool—not just for its systemic perspective.

**A primary aim is to increase preparedness for the less expected.**



Causal loop #1 illustration (enlarged view from the poster)

<sup>15</sup> Lawrence, M., 2024. [Causal loop diagrams: A short handbook](#).

# The workshop process

## Activity 3: Identify policy interventions to mitigate disasters and support policy goals

This step explores the underlying **drivers of crises** and potential **policy responses** on **POSTER 3**. Focus on one causal loop or hotspot from the polycrises map (**POSTER 2**) and examine the underlying drivers and potential interventions. Some will have been already mapped on **POSTER 2**, but ask now for others and explore the participants' ideas. Ask what could make the disaster more severe.

To support holistic thinking in this activity, we've provided a sheet outlining potential developments from the 'Risk on the Horizon' study that were mapped as leading to the 40 risks. This can be used as a source of ideas to add to participants ideas. The goal is to identify early drivers, blind spots, and strategic points of intervention for core drivers that might be helpful to **mitigate negative consequences, and to look holistically at what is driving the crisis.**

In **Activity 3**, you can identify potential policy responses and solutions, consider **the agency** of policymakers to address core drivers, develop **novel ideas** for impactful **solutions and partnerships**, and focus in on your policy goals. In this context, early preparedness activities and risk management refers to plans, actions, or policies that might reduce the likelihood and magnitude of negative consequences. It can be in general or relating to your policy area specifically. Alongside actions needed to prevent negative impacts, you can start to look at which actors should be involved in preparedness plans. Coherent cross-sectoral responses are likely needed. What science or knowledge gaps need to be addressed? Finish the workshop by picking the one 'big idea' and each group can report this in plenary.



Approx - 60 min

YOU WILL NEED :



Timer  
15-30-60 min



Same groups as  
**activity 2**



Stickers  
(Post-it)



Dots  
(Stickers)



Pens  
(Black)

A0 POSTER 3  
(to put on a wall)



## Activity 3: Identify policy interventions to mitigate disasters and support policy goals, (continued)

### Theory box:

The workshop concludes with early preparedness and early interventions identified, with a view to **enhancing resilience to crises**. We don't look at further knock on effects of the crisis, but at what has led us to it in this exercise.

There are obvious and complicated sources of risks and hazards, drivers of risks, enhancers of the severity of disasters, varying levels of exposure and vulnerability to risks, and barriers to managing risks. As well as known hazards, unexpected events or developments can pose a risk. This foresight risk assessment exercise tries to consider the complex, sometimes systemic future risks we face, to analyse where they come from, the interconnections between hazards, the relationships between impacts, and considers long-term drivers, especially to understand how they might escalate to a severe polycrises. **The workshop tool can be used for intermediate planning, but the main aim is to foster longer term future thinking and identify early interventions. As well as fostering an awareness of risks, polycrises and their drivers.**

The provided 'development drivers sheet' is optional, but if a holistic approach is something you want to make time for, this sheet is useful.

The Reporting Template in the provided workshop material can be used to examine other causal loops or hotpots post-workshop, and to look in more detail at your specific policy objectives.

# Post workshop outputs

**The outputs of the activities can help to better understand what risks could mean for your policy area and identify new ways to steer away from them. Using this tool will help to build awareness of systemic risks and cascading effects of risks, beyond well-known hazards. It can help to identify where polycrises come from, to support decision making and the development of strategies that might minimise risk events, stress test existing policies, as well as plan and strengthen crisis- and disaster preparedness measures.**

Having gone through these three activities, participants can repeat the exercise with other risks (not selected in **Activity 1**) and deliberate further what that means for their specific policy goals (see Reporting Template for ideas). Planning any further actions afterwards is possible. Policy makers can use these insights in their planning and decision making. Many solutions are cross cutting and beyond any single policy area, a feature of the nature of polycrises.

You can use the Reporting Template provided to record any useful insights from the meeting. Or you can design your own as fitting your specific objectives.

Further post workshop desk research could additionally explore shocks, wildcards, or black swan events, and how they might affect the hotspot events, or your policy goals. You can find examples from horizon scanning outputs<sup>16</sup>.

For example, a short report that summarises:

- a. **The risks selected by each group**
- b. **Main conclusions, surprises, highlights**
- c. **Potentially serious impacts identified**
- d. **Options for policy identified**
- e. **Challenges to any solutions discovered**
- f. **Further studies to initiate, for example the ideas below**
- g. **Any other future perspectives**

# Preparation tips

## Before the workshop:

- ▶ **Preparatory reading:** Share the document with attendees in advance (1-2 weeks). Ask them to read it and to think about the risks and their implications (also with your policy area in mind).
- ▶ **Plan and prepare:** Read this instructions document, edit to make your choreography, and review the posters. Carefully read the instructions and **perform a test run** to ensure a smooth workshop.
- ▶ **Train facilitators** in advance (eg introduction, rapporteur, making groups), and include a timekeeper.. You will need one facilitator per group. Assign roles and include a timekeeper.
- ▶ **Subgroup formation:** Split participants into groups of 6-8 each. Consider diverse backgrounds.
- ▶ **Allow sufficient time for processing outputs** (tips below and in the reporting template).
- ▶ **Materials:** Print the 3 posters (in A0 size), and the 40 risks cards in colour (A6 size) in advance (for as many groups as you have).
- ▶ **Room setup:** Book a room with enough space for participants to stand around posters. We suggest putting POSTER 1 on a table and POSTERS 2 and 3 on the wall.

## During the workshop:

- ▶ **Introduction:** Provide a brief introduction (less than 20 minutes) to frame the policy issues and objectives. It is important that people engaged in this work understand why they are doing it and the overall purpose of the exercise.`
- ▶ **Encourage open-mindedness:** Create a relaxed and safe space for ideas to flow. Icebreakers are a useful way to kickstart discussions and examples can be found online.
- ▶ **Manage discussions:** Address dominant personalities and hierarchy in the room to ensure all participants have a chance to be heard.
- ▶ **Follow the plan:** Hold and read your workshop choreography as you go through this complex workshop. Follow the steps and take notes.
- ▶ **Post-workshop:** Take photos of the posters for analysis and reporting. See the Reporting Template for the analysis of ideas.



# Workshop Materials

## Core tool components:

1. Preparatory reading document
2. This instruction guideline for facilitators
3. A detailed workshop choreography (see below, make it your own, an editable version is available on the JRC website)
4. 3 Posters
5. 40 risks cards (and one blank card)
6. Potential developments sheet (optional)
7. Reporting Template (optional)
8. PowerPoint slides (optional, available on the JRC website)

## Materials needed (not supplied):

1. Markers in 3 colours (thin black/blue for writing, and thicker ones in 2 colours for drawing connecting lines)
2. Pens for participants to take notes
3. Post-its in a few colours, or 'manual thinking' stickers or similar
4. Small sticky dots
5. Sellotape, blue tack, or pins to secure posters on a wall or a large desk

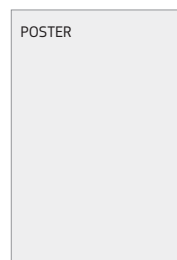
**Website with all material:** [https://knowledge4policy.ec.europa.eu/foresight/topic/polycrisis-exploration-workshop\\_en](https://knowledge4policy.ec.europa.eu/foresight/topic/polycrisis-exploration-workshop_en)



**Preparatory Reading  
Template**



**Instruction Guideline  
(including Choreography)**



**A0 POSTER  
3 Posters**



**Set of 40 Cards**



**Pens  
(3 different colors)**



**Stickers  
(Post-it)**



**Dots  
(Stickers)**



**Timer  
15-30-60 min**

# Workshop choreography

TIME	WHAT	NOTES	OUTCOME
30'	<b>Introduction</b> <ol style="list-style-type: none"> <li>1. Welcome and set the scene (3 minutes)</li> <li>2. Introduction to foresight on risks and this workshop tool (10 minutes)</li> <li>3. Q&amp;A (5 minutes)</li> <li>4. Overview of the day and presentation of policy area (5-10 mins)</li> <li>5. Move into subgroups (3min)</li> </ol>	<ul style="list-style-type: none"> <li>• Lead coordinator ensures the preparation for the workshop is done in advance, as described in the instruction guideline. They can introduce the workshop.</li> <li>• You could choose to do an icebreaker here. If so add more time.</li> <li>• A policy area expert can give the PowerPoint presentation.</li> </ul>	Participants are on the same page and understand the objective
10'	<b>Tour de table in sub-groups (10 min)</b>	<ul style="list-style-type: none"> <li>• Name and organisation, main role.</li> </ul>	Participants make connections and better understand each other's background.

TIME	WHAT	NOTES	OUTCOME
60'	<p><b>Activity 1:</b> <b>Enhance risk awareness by exploring the broad spectrum of risks</b></p> <p><b>Chose interesting risks (10 min)</b></p> <ol style="list-style-type: none"> <li>Each sub-group is handed the 40 risks cards. Ask participants to find a partner in the subgroup. Give each pair an equal number of risk cards e.g. 6 or 7.</li> <li>Each group is asked "which ones they deem to be <i>most interesting</i> to discuss today". Ask them "what's keeping you awake at night"?</li> <li>Each group choses 1 or 2 risk cards (in total, approx. 10-12 risk cards are a good number for the groups to continue with).</li> </ol> <p><b>Assess risks(20 min)</b></p> <p>Each group places their chosen risk card(s) on Poster 1, the Knowledge/Impact matrix poster, and explains briefly why they have chosen this specific risk.</p> <p><b>Discuss placement (20min)</b></p> <ol style="list-style-type: none"> <li>Participants can now discuss if any risk is not currently present but should be included.</li> <li>They then discuss if they agree with the placement of the risk cards.</li> </ol> <p><b>Select risks for Activity 2 (10min)</b></p> <ol style="list-style-type: none"> <li>The facilitator proposes to select three risks from the bottom right quadrant to take to the next step of the workshop. The facilitator should explain that ideally, the goal is to create a polycrisis that might not yet be on the radar (hence bottom right corner) and could be impactful on the policy area.</li> <li>The group can agree include a risk that is not in the bottom right corner.</li> <li>If necessary, a vote can be done using sticky dots to select three</li> </ol>	<ul style="list-style-type: none"> <li>Ask participants to focus on title and only refer to the text description, if necessary, at this first point.</li> <li>If participants ask what 'interesting' refers to, you can say i) topics they know little about, or ii) topics they would like to discuss in the workshop. Participants will have their own reasons, interests, and bias. (See above).</li> <li>Read the axes of Poster 1. If an explanation of what 'the amount of knowledge' means is needed, you can say : How much do we know about how a certain risk is linked to (and the mechanics behind it) the policy area, and the potential impact of it for the policy area. <b>Top left quadrant:</b> A lot of knowledge + low impact – can ignore <b>Top right quadrant:</b> A lot of knowledge, high impact – should already have a plan <b>Bottom left quadrant:</b> Little knowledge + low impact – could watch <b>Bottom right quadrant:</b> Little knowledge + high impact – risks to explore in this workshop.</li> <li>As facilitator you can be flexible and allow participants to choose any risk to take to activity 2, as long as the message was received that it is the bottom right quadrant of Poster 1 that indicates possible blind spots for further exploration. They might have different objectives, priorities or reasoning.</li> <li>There is a blank risk card available if participants want to add their own risk.</li> </ul>	<p>Risks, knowledge, and potential impact are quickly analysed in the context of chosen policy field.</p> <p>Participants think about different types of risks and listen to other's perspective on them.</p> <p>Three risks are selected for building a polycrisis map by each subgroup. Participants learn that foresight aims to shine a light on issues that might be overlooked in traditional analysis. The low probability, low awareness or highly uncertain risks that could still potentially be highly impactful can be explored in these exercises.</p> <p>Participants start to think about longer term futures.</p>
<p>► <b>BREAK.</b> During the break, the facilitator adds the three crisis cards (formerly risk cards) to Poster 2.</p>			Activity 2 is set up and ready to go.

TIME	WHAT	NOTES	OUTCOME
70'	<p><b>Activity 2:</b>  <b>Map future potential polycrises and explore interconnected (cascading) impacts</b></p> <p><b>Participants travel to a future in which the three selected risks have happened and turned into a crisis (in their imagination).</b></p> <p><b>Read and discuss the future crises (15-20 min per crisis)</b></p> <p><b>1. Manifestations (1st row)</b></p> <p><b>a.</b> Read the text of the first risk card aloud. Tell participants to imagine that the risk event has happened, and turned into a crisis.</p> <p><b>b.</b> What has happened? Ask participants to think about how the crisis might manifest itself (e.g. if is there a future armed conflict, people are injured; if there is economic contraction, businesses go bankrupt). What are three main big impacts?</p> <p><b>c.</b> Participants should agree on 3 main impacts to write on Post-its to place on Poster 2.</p> <p><b>d.</b> When you have three main manifestations (impacts) written on Poster 2, each should be read out loud at the end as a review, so that all participants hear and understand them. This helps memory recall later when the board gets busy.</p> <p><b>2. Impact on policy area (2nd row)</b></p> <p><b>a.</b> Ask participants to think about how these manifestations could impact their policy area. Go manifestation by manifestation and read them out.</p> <p><b>b.</b> Once six second row impacts on the policy area are found, each should be read out loud again quickly at the end as a review, so that all participants hear and understand it.</p>	<p><i>If you have skipped <b>Activity 1</b>, and started the workshop here at <b>Activity 2</b>, you will need to have selected 3 risks per polycrises map/ subgroup in advance.</i></p> <ul style="list-style-type: none"> <li>• Only negative impacts are up for discussion, as explained above.</li> <li>• The participants can write (capital letters for legibility) on the Post-its, but the facilitator places the Post-its on Poster 2.</li> <li>• One additional impact is OK if participants insist. Sketch a new box.</li> <li>• As indicated on Poster 2, remind participants that the first row of impacts is not yet about the policy area, but general impacts.</li> <li>• Let participants propose items to add, agree together on what will be written on the post-it (and to keep it short and simple).</li> <li>• Participants can write one by one and then the group can be encouraged to discuss. Be grateful for champions to drive the conversation, but also mindful of overbearing characters dominating the exercise. Try to also encourage more hesitant participants to speak.</li> </ul>	<p>3 crisis events and the disastrous consequences they could have in the future (within the frame of your policy area) will be mapped and imagined.</p> <p>Cascading effects and Interconnections will be drawn. Participants will see how many things are linked and events are connected, non linear, or even reinforcing the crisis, or driving a new crisis.</p> <p>Participants understand that disasters do not happen in isolation but are interrelated and can have far-reaching consequences.</p>



TIME	WHAT	NOTES	OUTCOME
	<p><b>Activity 2 (contd)</b></p> <p><b>3. Interconnections:</b></p> <p><b>a.</b> Ask participants to indicate where these manifestations and impacts are connected or linked to each other. In which direction do they influence each other? The facilitator draws connecting arrows.</p> <p><b>4. Repeat the above steps for Crisis 2 and 3.</b></p> <p><b>a.</b> Ask participants to indicate where there are connections between the manifestations and impacts of the different 3 crises. In which direction do they influence each other? The facilitator draws connecting arrows.</p> <p><b>b.</b> Ask participants if the impacts would amplify any of the other two Crisis cards themselves. If so, write that crisis' number on the map beside it.</p> <p><b>5. Identification and selection of causal loops or hot spots (15 min)</b></p> <p><b>a.</b> Look for causal loops (linked items that form a reinforcing circle). Try to find 3-4 causal loops and highlight them. Use a new coloured marker to draw specific attention to them.</p> <p><b>b.</b> Name the causal loops (e.g. 'Bad Governance', 'Hunger Games').</p> <p><b>c.</b> If no causal loops can be found, look for and name 'hot spots' (impacts or manifestations that have a lot of outgoing arrows/connections).</p> <p><b>d.</b> Pick one casual loop, or one hot spot to take to Activity 3. If necessary, vote with sticky dots.</p>	<ul style="list-style-type: none"> <li>• The facilitator should be the only one who draws the arrows, otherwise the map can get messy.</li> <li>• If there are many arrows on the board, the facilitator can use a second colour to distinguish them.</li> <li>• Facilitators can find causal loops easily by looking for impacts with numbers linking to one of the three crises, if the affected crises also drive the source of the impact (e.g. if an impact of Crisis I drives Crisis II, and Crisis II drives Crisis I, there is a causal loop). Doing this step simply helps ensure a causal loop is found if none has appeared.</li> <li>• When a facilitator identifies a causal loop during the discussion, mark it discreetly to refer back to later.</li> <li>• 4-6 items (crises, manifestations, or impacts) are a good number of items in a loop for a causal loop to take to the next activity.</li> <li>• The other causal loops/hot spot can be analysed post workshop (see reporting results above).</li> </ul>	<p>Participants learn a bit about reinforcing causal loops. This can help to understand the dynamics of a system and that there are not only linear cause-effect relationships, but reinforcing 'vicious circles'.</p> <p>They may learn about forces and disequilibrium in the potential disaster system they had not thought about.</p> <p>Several interesting causal loops or hotspots for further analysis are identified.</p>
<p>► <b>BREAK.</b> During the break, the facilitator should write the selected causal loop or hot spot from Poster 2 on the top of Poster 3.</p>			Activity 3 is set up and ready to go

TIME	WHAT	NOTES	OUTCOME
70'	<p><b>Activity 3: Identify policy interventions to mitigate disasters and support policy goals</b></p> <p><b>Drivers:</b></p> <p><b>1. Discussion on which drivers could lead to this causal loop, or hot spot. (20min)</b></p> <ol style="list-style-type: none"> <li>The facilitator reads the name of the causal loop or hot spot, and each item out loud.</li> <li>Go item by item and ask the questions: <ol style="list-style-type: none"> <li>What could be leading us to such a crisis?</li> <li>What would have to happen between today and the future to make this item serious/extreme?</li> <li>What are the root causes of this crisis case?</li> </ol> <p>(If it helps to give some examples, add the prepared post-its indicating which manifestation or impact led to this item from Poster 2. Or use the supplied optional developments sheet from the JRC Risks report).</p> </li> <li><b>Cluster</b> post-its according that are similar.</li> <li>Lastly, <b>name each cluster</b> with a post-it of a different colour. These are the drivers of the causal loop or hot spot.</li> <li>Add 4 or 5 of these drivers to the bottom part of Poster 3 (Policy interventions).</li> </ol> <p><b>Discuss policy interventions. (20 min)</b></p> <ol style="list-style-type: none"> <li>Read out the selected drivers and the questions on Poster 3.</li> <li>Ask participants to (individually) add post-its to Poster 3 directly themselves, to answer each driver.</li> <li>At the end, go through the post-its and read out what has been collected.</li> <li>Discuss and label any big novel ideas.</li> </ol> <p><b>Brainstorm key stakeholders. (10 min)</b></p> <p>(Unveil the third column of the policy interventions table if you had hidden it).</p> <ol style="list-style-type: none"> <li>Let participants individually add post-its to Poster 3, to list actors for each driver.</li> </ol> <p>At the end, go through the post-its and read out what has been collected.</p> <p><b>Wrap-up (20 min or 5 to 10 minutes per group)</b></p> <p>As an exercise conclusion, invite the groups back to plenary. Ask each group to state any 'big idea' they came up with to close. If there is more time, ask them to summarise in the form of bullet points:</p> <ol style="list-style-type: none"> <li>the group's main discussion points, and future's insights or any surprises from the day</li> <li>Which 3 risks were selected, which causal loop or hotspot was selected?</li> <li>Any interesting policy implications or interventions identified, and key stakeholders to be involved.</li> </ol>	<ul style="list-style-type: none"> <li>The facilitator can mention that this is about extreme versions of hot spots (in comparison to what we can already see).</li> <li>In most cases, the items of a causal loop can already be observed. Here the objective is to think about what would make them more serious or extreme (amplifiers and core drivers).</li> </ul> <p><b>• Optional step:</b> The facilitator can use the supplied sheet of developments here. Developments are numbered on the risk cards and on the sheet. You can think about adding these developments / drivers that lead to the risk as mapped in the JRC report 'Risks on the Horizon', 1) if the discussion is slow, or 2) to highlight the surprising sources of holistic risk event drivers.</p> <ul style="list-style-type: none"> <li>As facilitator you can animate some discussion here. For example, ask the participants to think about potential policy interventions in terms of traditional measures, e.g. regulatory, budgetary, how to enhance already existing measures, etc. but also - try to think about any 'big novel ideas'.</li> <li>Think about tools that have not been invented yet, unwritten policies, collective versus individual actions and behaviour and / or anything else that comes to mind. Be as abstract as you like.</li> <li>Think about dampening down or amplifying elements of a system as an intervention.</li> <li>Remind participants of the importance of community solutions for impact.</li> </ul> <p>We suggest finishing the workshop on a lighter note with each group only reporting in plenary the 'big idea', as it can be an intense exercise.</p> <p>The main facilitator (or assigned rapporteur) could also note any novel or useful insights to take forward in future work, or actions agreed to close the workshop.</p>	<p>Participants learn about systemic causes and drivers of crisis. The sources can be both obvious and surprising. They can come from a faraway system off the radar (blind spot).</p> <p>Leverage points for early policy intervention can be found (in a structured way), to take forward and feed into preparedness planning. They could be to protect specific policy goals, or to mitigate the potential crisis.</p> <p>Collect possible ideas for actions to mitigate your crisis, impact your loop, or support your policy goals.</p> <p>See the causal loops as a starting point for futures storytelling, and the interventions as initial preparedness ideas to further develop the reporting template provided offers tips for structuring and further analysing the workshop outputs.</p>
THE WORKSHOP IS OVER. THANK EVERYONE FOR THEIR PARTICIPATION.			

# Science for policy

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