

Task 2.2 Explore possible futures

Task 2.2.1 Explore possible climate resilient futures

What is this task about?

This task is about exploring a range of alternative desirable futures for your region considering the future climate risks it may face. Exploring alternative futures is the first step in helping your region develop its shared vision and move beyond a narrow understanding of climate adaptation towards one that treats climate resilience as a central organising principle. It is intended to stimulate stakeholder thinking about alternative desirable versions of what the future could look like, informing ideas to then be used to ground development of the shared vision.

The futures developed in this task differ from the risk-based scenarios in Task 1.3.1 in that these do not inform quantitative, risk-based projections, but are rather more qualitative, narrative descriptions of future states that encompass multiple dimensions. The risk-based scenarios inform you about the (uncertain) range of future risks your region may face and their impacts. The futures developed in this task explore the alternative ways your region could choose to live under the range of potential risk-based scenario conditions.



Insight: For the implementation of this task, it is advised to procure assistance from an experienced futures facilitator. Using these methods effectively and in a participatory setting requires good facilitation

For this task, a future is understood to consist of a storyline or narrative description of alternative sets of social, ecological, and technical dimensions that govern the overall organisation and functioning of your region. Desirable futures are those that embody **key principles** and address the key challenges that your region would like to address. Your region's climate resilience will be one challenge, while the other challenges and principles to be addressed will be specific to your region's context and history.

Why is it important?

Exploring desirable futures is pivotal in taking the decisions to collectively shape your region's transition to climate resilience while recognising the inherent climate and socioeconomic uncertainties you face. By envisioning diverse futures, including those involving smooth or abrupt transitions, you gain invaluable insights into what a just climate transition means for different people, as well as the complex interplay of factors that shape climate resilience. It also opens stakeholders up to the possibility of creating new futures and exploring their roles in that process.

These futures can expand the possibilities for your region's climate transformational adaptation vision. It provides you with a structured way to imagine possibilities for your region beyond business as usual, rooted in past, present, and emergent trends.

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How can you complete it?

- **Agree on the challenges that your futures need to address so that these would be considered desirable.** Building on the initial set of problem/challenge statements framed during Task 1.1.2, agree on the set of challenges to be addressed in your alternative futures. Start with your drivers of climate risk, before including the other challenges that your region is seeking to address, such as inequality, regional development, wellbeing, etc. These should be aligned with your planning objectives. It is important to focus on the most important challenges for your region, and not try to cover everything.
- **Understand what is already changing and how these changes affect your region's future.** The methodology most used for this purpose is called 'horizon scanning', which systematically detects early signals of potentially important developments. It is a method to identify emergent changes occurring in both your region and elsewhere that exert influence on the future. In particular, consider how the potential development of your climate risks will influence your broader system in the short-, medium and long-terms.
- **Select a small set of these changes and use them to explore how the future might look.** Select those changes that are most relevant for your region (i.e. 'drivers' of change), e.g., because they have the highest impact, and/or because you see them as emergent opportunities. It is important to include at least one climate driver in this exercise. To map how these futures might look, there are several methodologies, detailed in **Appendix D8**. Choose a methodology based on your available time and resources.
- **Identify key levers of change for each desirable future.** For the alternative desirable futures developed, identify the main "levers" or "drivers" of change that would allow your region to achieve that future. These will feed into Task 2.4.1.
- **Develop narratives and/or visuals representing the selected futures:** Select a few alternative futures to translate into a short narrative and/or visual to use in the remainder of the participatory process (between 2-5). This narrative describes how you will live in each future, encompassing its social, ecological, technical, political, and other dimensions. It also identifies what are the main features of this future and what makes it unique.

Futures development benefits from engaging a diverse set of stakeholders with different perspectives. To keep this process manageable, it is better to work with a small group of between 8-30 people (depending on the availability of facilitators, with at least 1 facilitator per 8 people). We suggest conducting this process with a selected set of representative stakeholders. This should include vulnerable groups, youth, private sector and key industries in your region, public sector representatives, and other interest groups on relevant matters that affect your region. It is important to include representation of everyone who is thinking and working towards the future of your region, especially those who are often not given a voice.

Further detailed technical guidance on completing this task, along with useful tools and methods, can be found in **Appendix D8**.

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What are key inputs for the task?

- Initial problem framing developed in Task 1.1.2, to provide you with your initial set of future challenges.
- System map developed in Task 1.2.1, to provide you with clear boundaries of the system, and help you identify key drivers.
- Stakeholder map of Task 1.2.2, to help you identify who can drive or influence these futures, who will be affected, and who should be involved in your conversations.
- The risk-based scenarios developed for the Climate Risk Assessment (Task 1.3.1), and the results from the assessment of these.

What are the expected outputs?

A small set of qualitative narratives of desirable alternative futures that can be shared and discussed with stakeholders.



Before moving on, have you...

- ☐ Identified drivers and seeds of change with a wide set of stakeholders?
- ☐ Outlined at least 2 and max 5 alternative futures and developed narratives for them?
- ☐ Identified key levers of change for each desirable future?

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Agree on the challenges that your futures will need to address to be considered desirable.

Building on the initial set of problem/challenge statements framed during Task 1.1.2, agree on the set of challenges to be addressed in your alternative futures. Start with your drivers of climate risk, before including the other challenges that your region is seeking to address, such as inequality, regional development, wellbeing, etc. These should be aligned with your planning objectives. It is important to focus on the most important challenges for your region, and not try to cover everything. Think also of the principles or “non-negotiables” that your futures should have to be considered desirable. These could link to just transitions, ecological sustainability, or others.

Understand what is already changing and how these changes can affect your region's future.

The methodology most used for this purpose is called “horizon scanning” which is defined as the systematic outlook to detect early signals of potentially important development. In other words, it is a method to identify emergent changes happening in your region, as well as elsewhere, that can have an important influence in the future. In particular, consider how the potential development of your climate risks will influence your broader system in the short- medium and long-terms.

There are some horizon scanning databases available, for example Forum for the Future's Signals of Change <https://www.thefuturescentre.org/signals-insights/> or the Global Trends reports produced by ESPAS <https://espas.eu/gtr.html> as well as the Megatrend Hub of the JRC https://knowledge4policy.ec.europa.eu/foresight/tool/megatrends-hub_en. You can use these sources to identify changes and trends that might affect your region; but it is important to also complement it with changes that are locally happening, for example, new transformative innovations (technological, social, or other) that offer alternatives to the status quo.

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Select a small set of these changes and use them to explore how the future might look like.

You can select those changes that are more relevant for your region (i.e. “drivers” of change), because they might have the highest impact, and/or because you see them as emergent opportunities. It is important to include at least one climate driver in this exercise. To map how these futures will look like, there are several methodologies. We suggest three options, which you can choose from based on your time and resources:

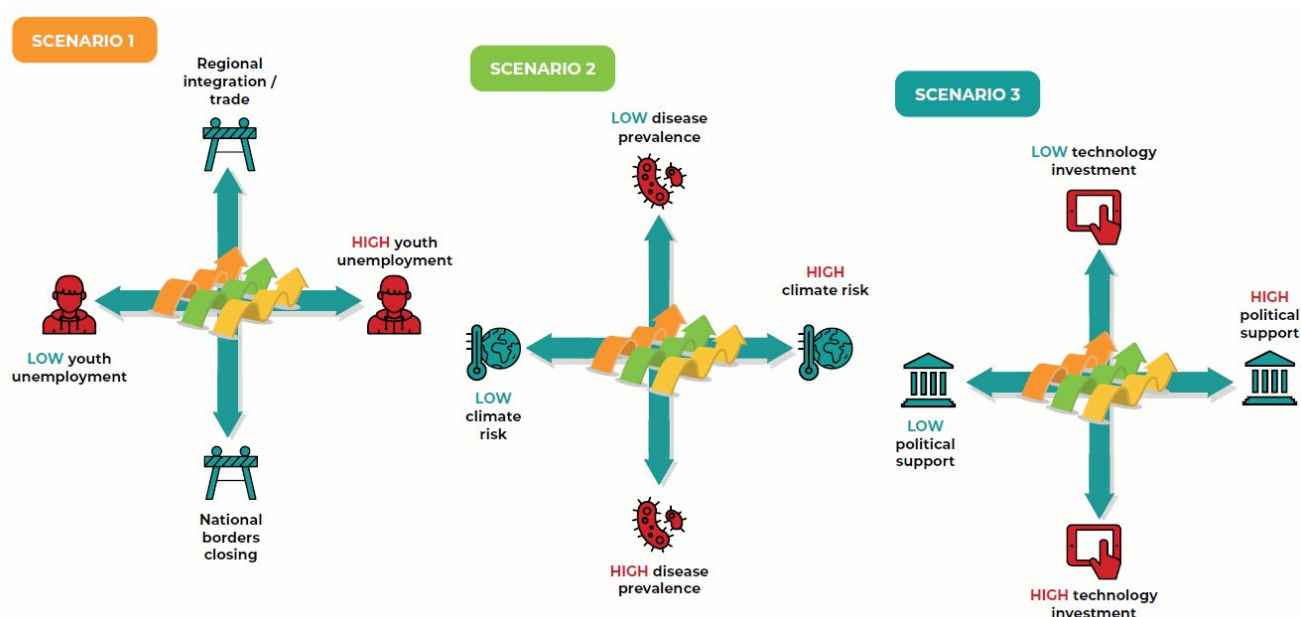


Figure D8.1: Example of 2x2 scenarios. Source: Chesterman S, Neely CN. 2021. *Foresight for Future Planning Training Series: Information Pack*. Wageningen, the Netherlands: CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS). Available online at: www.ccafs.cgiar.org.

2x2 matrix: This is the simplest method, in which you chose two drivers that are potentially particularly impactful in your region and position them across an XY axis with high/low versions of the driver. For instance, if your drivers are ‘political polarisation’ and ‘digitalisation’, you will have an X axis from ‘low political polarisation’ to ‘high political polarisation’; vs a Y axis between ‘low digitation’ and ‘high digitalisation’. You then describe how each of these 4 futures would look like, thinking of social, technical, ecological, political, dimensions. Note that in this case you will generate desirable and undesirable futures, and you will have to select and adapt futures to make them desirable for your region.

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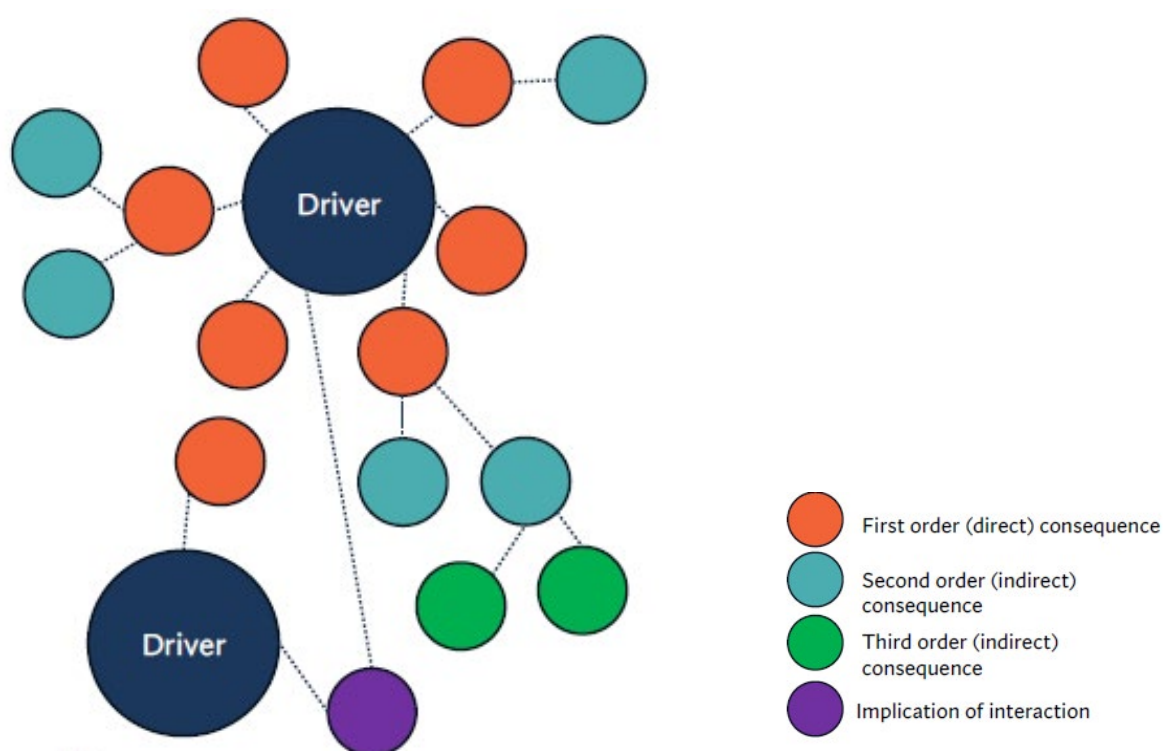


Figure D8.2 1: Diagram of a Futures Wheel exercise. Source: Policy Fit for the Future. The Australian Government Futures Primer. Available at <https://nsc.anu.edu.au/content-centre/research/policy-fit-future-australian-government-futures-primer>

Futures wheel: This is a visual method to identify cascading events emerging from a set of drivers or seeds. Select 2-3 drivers and seeds, perhaps those that you expect to be most impactful. What would be the primary consequences? What technological, social, policy, market changes would this lead to? And what would be the consequences after that? After you have done this for every driver and seed, think about what the consequences of two or three seeds and drivers would be combined. Try and do this exercise for 3-4 layers of the cascade of events. Once you are finished, write a narrative that described the visual map that you have developed. As in the previous case, not all your futures will be desirable, so you will have to select and further tweak your futures to make them desirable.

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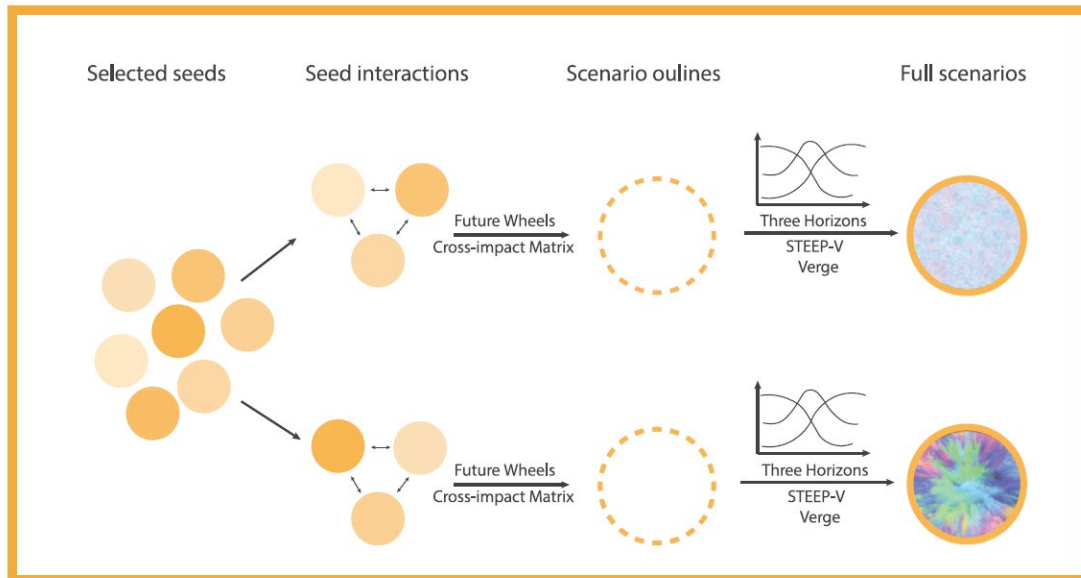


Figure D8.3 2: Summary of the “Seeds of the Good Anthropocene” approach. Source: Tanja Hichert, Reinette Biggs and Rika Preiser (2019) CST Toolkit 2019

Use the “seeds of the good Anthropocene” methodology: This methodology will allow you to develop desirable futures based on existing changes, and it combines “Futures Wheels” with “Three Horizons” approach. It is different from the other approaches since it starts from innovations or seeds already happening on your region, that could lead to transformations if scaled. It is an engaging, participatory methodology that will develop rich narratives of desirable futures, but to be performed correctly it would need at least a two-day participatory workshop. If resources are available, it is advised to use this approach. A guide can be found in the toolbox and list of resources.

If you use the 2x2 approach or the Futures Wheel, define which futures are “desirable”. To do so, use the criteria that you identified initially (challenges to be addressed, principles) and see in which cases these are met. You can refine your initial futures to make them more desirable, if there is internal coherence within them.

Identify key levers of change for each desirable future.

For the alternative desirable futures that you have developed, identify what would be the main drivers of change that would allow your region to achieve that future. This is what we call “levers of change”, which can be understood as areas of intervention where targeted action can lead to significant and transformative changes. These can be concrete things like subsidies, standards, regulations, but also infrastructures, social practices and values, etc. An deeper explanation of this concept, with examples can be found here <https://donellameadows.org/archives/leverage-points-places-to-intervene-in-a-system/>.

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Develop narratives and/or visuals representing the selected futures:

Select a few of these futures and translate them into a short narrative and/or visual that you can use in the rest of the participatory process. This narrative describes how we will live in each of these futures, encompassing social, ecological, technical, political, and other dimensions. It also identifies what are the main features of this future and what makes it unique. A good narrative is an internally coherent and consistent, with elements within the story fitting together, even if the future portrayed is very different. At the same time, a good narra-

tive is engaging and emotionally compelling, it connects with the reader because they can relate to the characters and elements of the story and challenges them to think differently. An additional layer of engagement can be achieved using experiential futures, which is bringing these narratives and futures into concrete experiences and everyday objects. A guide in to this method can be found here <https://futuryst.blogspot.com/2017/06/ethnographic-experiential-futures.html>.



Insight: This is an example of a narrative for the Nature futures developed by IPBES.

Future 1: Optimising nature

- 'Nature for society'

A highly connected world that shares knowledge and technology to maximise efficient and sustainable utilisation of nature's contributions to people while ensuring maintenance of the key ecosystem functions that underpin them.

Key words: eco-efficiency, green growth, smart cities, urban-rural integration, land-sharing, optimised ecosystem services, engineered ecosystems

Future 2: Reciprocal stewardship

- 'Nature as culture/one with nature'

In this world, values of reciprocity and harmony drive the relationships of humans with nature at all levels of human organisation. Biological and cultural diversity are co-conserved and co-managed across a wide range of interconnected bio-cultural systems.

Key words: bio-cultural heritage, stewardship, commons, post-growth, cultural landscapes, engineered ecosystems, self-sufficient settlements

Source: IPBES (2023). The Nature Futures Framework, a flexible tool to support the development of scenarios and models of desirable futures for people, nature and Mother Earth^{1,2} and its methodological guidance

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Supporting resources:

Useful tools

- Foresight for Future Planning Training Series Toolkit CGIAR <https://aiccra.cgiar.org/publications/foresight-future-planning-training-series-information-pack>
- Towards a climate-resilient future together: A toolbox with participatory foresight methods https://www.researchgate.net/publication/345733771_Towards_a_climate-resilient_future_together_A_toolbox_with_participatory_foresight_methods
- The Futures Bazaar Toolkit <https://www.bbc.co.uk/gel/features/futures-bazaar-toolkit>
- Future's Signals of Change <https://www.thefuturescentre.org/signals-insights/>
- Global Trends reports produced by ESPAS <https://espas.eu/gtr.html>
- Megatrend Hub of the JRC https://knowledge4policy.ec.europa.eu/foresight/tool/megatrends-hub_en

Useful methods

- Generating vision of good Anthropocene: the Manoa Mash-up scenarios methodology (Seeds of the Good Anthropocene Methodology) <https://www0.sun.ac.za/cst/wp-content/uploads/2020/01/Manoa-Report-Digital.pdf>
- IPBES Nature Futures Framework <https://besjournals.onlinelibrary.wiley.com/doi/10.1002/pan3.10146>
- Ethnographic Experiential Futures <https://futuryst.blogspot.com/2017/06/ethnographic-experiential-futures.html>
- The Nature Futures Framework, a flexible tool to support the development of scenarios and models of desirable futures for people, nature and Mother Earth, and its methodological guidance <https://zenodo.org/records/8171339>