### **Youth Fit for 55**

## **Foresight Toolkit**



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The challenges of sustainability and climate change are pressing global concerns that require our serious attention. It is like finally having to acknowledge the big elephant in the room! We've all heard the buzzwords – sustainability, climate change, global warming – and they're not going away anytime soon, and neither is the elephant. We must tackle these challenges because, to put it bluntly, we only have one Earth and one timeline.

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YOUTH FOR FIT



### Introduction

The United Nations and the European Union have embarked on their own ambitious journeys toward a more sustainable and greener future. The United Nations' 2030 Agenda for Sustainable Development encompasses 17 Sustainable Development Goals (SDGs) and serves as a universal call to action to end poverty, protect the planet, and ensure prosperity for all.

Europe's response is the European Green Deal (EGD) – the new growth strategy for the transition to a sustainable economy and a radical vision for a climate-neutral continent in 2050. The "Fit for 55" package generated by the EGD encapsulates a series of legislative proposals and regulations aimed at reducing EU's greenhouse gas emissions by at least 55% by the year 2030 and comprises a set of policy measures addressing every facet of the European economy, from energy production and transportation to industry and agriculture.

Together, "Fit for 55" and the "Green Deal" represent a formidable response to the pressing challenges of our time, laying the foundation for a sustainable and green transition that will shape the EU's future and contribute to global efforts to combat climate change.

This brings us to the Youth Fit for 55- Erasmus+ project, an initiative that raises awareness, empowers youth, and equips them with essential skills and knowledge to actively promote and advance the values of the green transition.

Through this project we aim to contribute to the development of critical skills for/of youth educators, trainers, youth leaders) and young people alike while, also, strengthening organisational capacities of youth serving entities, so that they can effectively engage in and contribute to the green transition in Europe. This will enhance their ability to implement sustainable practices and community-based initiatives that align with the goals of the Fit for 55 agenda. By doing so, we seek to create a ripple effect that not only educates but also mobilises the youth sector towards a more sustainable and environmentally conscious future.

Hence, we thought of creating a friendly and easy-going toolkit that should represent a collection of the most relevant foresight tools meant for helping the redesign of the youth educators and youth serving organisations work practice, for them to build or adapt their vision and strategic paths within the new EGD context.

### So how do we plan to do this?

The project will apply a bottom-up approach, starting at the grass root level, by raising awareness and building the basic knowledge base through an **Awareness Guide**. Then, by providing practical digital resources such as this toolkit, youth trainers youth leaders will be able to develop specific skills that should expand their vision and help them better position themselves and their organisations within the green transition paradigm.

Foresight means an innovative strategic planning and solution design that works with alternative futures to enable decisions and joint actions. It's like getting a glimpse into the future, but without a crystal ball. Foresight is all about anticipating trends, understanding potential challenges, and getting ahead of the curve by preparing for various scenarios.

In addition, certain authors have defined it as follows:



"The capacity to think strategically about the future." 'A systematic, participatory and multi-disciplinary approach to explore mid- to long-term futures and drivers of change.' (Bourgeois, 2015)

Meanwhile, the OECD says about strategic foresight that it 'does not attempt to offer definitive answers about what the future will hold. (...) There are no hard facts about the future and the evidence base is always incomplete. The objective is not to 'get the future right', but to expand and reframe the range of plausible developments that need to be taken into consideration.'

"The future depends on what you do today" – Mahatma Ghandi

# Why Think about the Future?

And this could serve as a sufficient answer to this question.

Decisions, policies, strategies based on the assumptions of the present day, might be limitative and restrictive. By considering alternative futures based on trends, drivers of change and even our own desires and ambitions, we can build a future for which we will be better prepared and deliver the outcomes that we are thriving for.

In a speech from 2022, Kristalina Georgieva, IMF Managing Director said - "[We are moving] from a world of relative predictability ... to a world with more fragility – greater uncertainty, higher economic volatility, geopolitical confrontations, and more frequent and devastating natural disasters – a world in which any country can be thrown off course more easily and more often."

To a certain degree the world has always been in a continuous process of change. From the perpetual process of technological advancement to social and geopolitical shifts, we can say that, along the years, the only certainty has been change itself. In this context, of change, disruption, and crises, foresight tools and methodologies can serve as a valuable instrument for navigating the uncertainties that characterise the future.

As Shallowe et al. (2020) have previously said, foresight helps us think about the future in a strategic manner. Foresight allows us to anticipate and prepare for what lies ahead. And, in a world of constant change, the ability to adapt and innovate can greatly serve as a competitive advantage at both organisational and individual levels.

Foresight methodologies are based on a systematic, participatory and multi-disciplinary process (Bourgeois, 2015) of examining (mega)trends (as drivers of change), weak signals, anticipated potential disruptions and different possibilities so that we can make informed decisions, based on a more comprehensive understanding of the evolving landscape, about how to act in different potential situations.

By better understanding the future and embedding foresight in our current practices, we also obtain a deeper understanding of the dynamics and particularities of our constantly changing world. This way, we can work towards actively shaping our destiny, rather than passively reacting to it. And the future full of both uncertainties and possibilities finds us better prepared for potential risks and ready to make the most of the opportunities it can bring.

### Why Think about the Future?

Further, one powerful way to illustrate the practical application of foresight approaches is by examining the **concept of megatrends** - which are strong drivers of change that can shape the world on the long term and on a large scale. They can even serve as reasons for radically reshaping entire industries, societies and the global landscape. In this sense, some examples are shown below, showcasing the profound impact they can bring.



**Demographic change** - as population is expected to grow in the coming decades and live for longer - e.g. according to United Nations estimates, population is expected to reach 9.7 billion by 2050 and 10.4 billion by 2100.



**Urbanisation** - by 2030, two-thirds of us will be living in cities. In 2022 already more than half of the world's population was living in cities (according to Statista) and the trend is continuing to grow, with people moving from rural to urban areas in order to have access to better job opportunities, as well as different types of services (e.g. health, education etc.).



**Climate change** is probably the most important megatrend impacting our lives, with temperature increases, extreme weather events and droughts, loss of ecosystem services, causing social instability (e.g. climate migration). According to the United Nations, up to 3.6 billion people live in places that are highly vulnerable to climate change. And they are the ones most likely to become climate refugees.



**Technological change/ disruption** - the world is becoming more and more digital, as new technologies are changing our everyday lives and disrupting the business environment. In that sense, we have already started experiencing the 4th industrial revolution, with artificial intelligence redefining the human-machine interaction, and trends such as digitization, increased connectivity, robotics, quantum computing, internet of things, and other, impacting numerous economic sectors.



**Geopolitical shifts** - as new geopolitical players are rising and new alliances are forming on a global level, leading to changes in the global balance of power.

**Globalisation** - the economic interconnectedness between countries has been shaping our reality for a while now already. Even though the pandemic has put under the spotlight the vulnerabilities brought by long value chains, the world is still strongly interconnected in that sense, with the global movement of goods, services and information being strong determinants for economic relationships and supply chains. Moreover, globalisation also strongly leads to cultural exchange, with implications for international relations, values, and identity.

# Why a foresight toolkit for youth educators?

The goal of this toolkit is to serve and enable youth educators (teachers, trainers, youth leaders, practitioners engaged in informal/ non-formal learning etc.) to act as agents of change in the process of green transition. By equipping them with highly usable foresight tools, they can then act as multipliers and impact a broader range of young people and other groups, contributing this way to behavioural change and, subsequently, serving as drivers for the green transition. In this sense, we expect the toolkit to guide them into designing and implementing projects and long-term strategies with the concrete purpose of increasing adoption of green practices among young people.

The EU's commitment to addressing climate change and environmental degradation through the European Green Deal requires careful planning, strategic thinking and a long-term vision, at both macro and grass-root levels. Further, some concrete examples are specified to illustrate how youth educators can make use of foresight approaches and tools to act as driving agents for the green transition.

Youth empowerment. Educators can use foresight tools to empower young people to think critically about the future, in the context of climate change and other (mega)trends. They can incorporate foresight exercises into their teaching methods and encourage students to explore potential scenarios and solutions to global challenges. These kinds of approaches can help equip young learners with valuable skills for decision-making and problemsolving in a rapidly changing world Identifying technological developments and providing career guidance. By identifying technological trends and breakthroughs in areas such as renewable energy, sustainable agriculture, clean transportation and other, youth educators can help accelerate adoption of green technologies among young people, as well as prepare them for the jobs of the future. By understanding emerging job opportunities and industry trends, young people can make informed decisions about their educational and career paths.

**Personal and professional development.** Foresight techniques can be used for personal and professional development. By staying informed about trends in education and youth development, educators can continuously enhance their skills and adapt their teaching and work methods to remain effective in their roles.



# Foresight in Action: An Overview of Tools



# **Foresight Tools**

Enough theory. Let's allow this document to take the shape of an actual toolkit, so let's set the stage for the foresight playground. In this section we are diving deep into the area of foresight tools and a series of relevant case studies.

We are going to lay out a variety of foresight instruments for you, step by step, that you can use for strategic planning, identifying solutions for all kinds of challenges and, thus, set yourself on a success path, especially in this new context of the green transition.

The use of a particular instrument depends on the context of usage, on the stakeholders engaged and, why not, on the preference and knowledge base of every practitioner.

So, there you have an overview of the most popular foresight methodologies!

## The Structure of Our Foresight Tools

In the upcoming slides, we will introduce a selection of Foresight Tools available for your use. These tools are designed to assist in anticipating and planning for future developments in your field.

Each tool will be presented following a comprehensive structure that includes:

- A brief description
- The expected outputs and outcomes
- The type and number of participants
- The resources that you can use
- The estimated time and level of effort required
- The limitations and risks
- The relation to other Foresight Tools

Through this detailed presentation, we aim to equip you with the knowledge and resources needed to effectively leverage Foresight Tools in your strategic planning, helping you to navigate the complexities of the future with confidence.

### **Scenario Building**

Scenario Building is a foresight tool that aims at exploring and anticipating potential future developments, in the shape of a narrative that also addresses challenges, opportunities or uncertainties existing in a certain context.

Scenario building is a strategic planning method that involves developing a range of plausible and well-defined future scenarios/narratives of possible alternative futures that provide a point of reference when evaluating policies or strategies.	Output: a set of scenario narratives (alternative and potential futures) Outcome: A shared comprehension of the dynamics of change, together with various options, key stakeholders might be exposed to in different contexts and situations	Any type of participants can be involved: decision- makers, experts, lay people etc. who have an interest in the topic approached by the foresight tool. No. of participants: 5- 10 people per working group, with a maximum of 5 groups.
<b>Challenges</b> that might appear rely on aspects such as the level of expertise, participants engagement, biassed opinions, facilitators skill and their know-how on the topic.	The time needed varies with topic complexity and participant count, usually finishing in 1-2 days. Effort is moderate, involving participant engagement and guided by a clear process.	Scenario building can be associated with other tools such as: Visioning, Weak signals and Trend analysis.

#### Resources

**Expertise:** specific expertise and know-how is not obligatory; expertise depends on the subject. Scenario building does rely on existing information, but it also implies creativity and depends on the specific interests and needs of the target group.

**Data:** access to certain information, sources or materials that would serve as input and point of references for the discussions. It is important to have previously identified a set of key drivers of change that would serve as a reference point for the discussions.

**Facilitation:** Skilled facilitators are needed, especially if the event involves, for example, lay people, to engage everyone, present. Facilitators must know the procedure very well and keep the discussions focused on the desired outcomes of each phase. The number of facilitators is the same as the number of the working groups.

**Equipment:** flip charts, pens, markers, sticky notes, projector screen. For online events – collaborative platforms such as Mural, Miro, etc).

**Space:** You can use one spacious room, if it can accommodate more working groups and allow them to have discussions without disturbing the other groups. Otherwise, multiple rooms needed - working rooms and a bigger room for presenting the final outcomes/plenary session.

Another important aspect is the need for a very well established and detailed procedure that includes steps, time slots, presentations etc. Facilitators must be very familiar to the procedure to be able to guide the participants throughout the exercise.

### **Scenario Building**



### Description

It is important to note that the resulting scenarios are not predictions, they are not meant to be entirely positive or negative, but to provide potential and alternative developments in the future, also coupled with the desired outcome that does come with a certain degree of realism. These scenarios must also include choices/policies/actionable steps/solutions that should be taken to achieve that future.

Scenarios should be set at some distance in the future: 10 to 20 years in the future and they are developed in the context of a workshop.

Since it involves creativity and allows freedom of thinking when producing the scenarios and the actionable plans, the tool can help drive innovative solutions that could lead to an ambitious future.

### Steps

- 1. Describe the world/the specific context as it is. Describe the status-quo of the domain/area that will be subject to the workshop; Always keep in the backend, your final objective.
- 2. Identify the key drivers (or they could be provided by the organisers) of factors of change that could impact the future, be it in a positive or negative way (e.g., social, economic, technological, political, environmental, etc.);
- 3. Review these drivers and select those that are relevant for your topic, related to the statusquo and to the final objective;
- 4. Rounds of discussions and voting regarding the drivers of change;
- 5. Create plausible scenarios that describe the possible futures;
- 6. Vote or choose the most plausible scenario/s;
- 7. Identify an actionable plan to achieve the desired scenario;
- 8. Present the whole narrative within a plenary session
- 9. A final vote of the most desirable scenario out of those presented by the working group (optional)

### Benefits

Scenario building can be used when one needs to understand how the future might develop or change over time and, also, how the pathway from present to future unfolds. The method is useful to improve planning capacity, enrich public policy decisions, identify future business opportunities or projects, understand the actors' behaviour, pinpoint uncertainties that are bound to influence the future and identify valid action and strategies according to the envisioned future.



### **Sequential Backcasting**

Sequential Backcasting involves working backward from a desirable future state to the present situation, helping organisations identify the steps needed to make that future possible.

It's a strategic planning method that emphasises **envisioning** a preferred outcome and then determining the necessary actions and enabling factors needed to make that vision a reality. **Outputs:** An image of the desired future state and a roadmap/ action plan outlining the necessary steps to achieve that envisioned future state.

**Outcomes:** An enhanced understanding of the underlying drivers of change required to influence the system positively, for achieving the envisioned future state. This understanding can guide strategic decisions and resource allocation.

To create an accurate future vision and roadmap, we need: relevant and enough data, diverse and expert stakeholders, skilled facilitators to guide discussions, and a clear understanding of the complexity of the systems and variables involved. The time required can vary based on the complexity of the project and the number of participants. A typical backcasting workshop can range from a few hours to a few days, involving multiple sessions for discussions, analysis, and action planning. Participants should include decision-makers, subject experts, and key stakeholders who have a deep understanding of the current context and can contribute to envisioning the desired future state. Depending on the project's scope, involvement from cross-functional teams can add diverse perspectives. **No. of participants:** 5-12 people or more, split into working groups

Backcasting can be complemented by other foresight tools such as scenario planning, visioning, and trend analysis.

#### Resources

**Expertise:** Subject-matter experts who can provide insights into the system, trends, and potential future developments.

Data: Access to relevant materials and data sources to inform discussions.

**Facilitation:** One or more skilled facilitators to guide the process and keep discussions focused on the desired outcomes. - If discussions will be split between groups/ tables, multiple facilitators will be needed according to the number of tables.

**Equipment:** flip charts (one per working group), pens and markers, projector screen, sticky notes; for online or hybrid versions - visual collaboration platforms (e.g. Mural, Miro), Google Slides etc.

**Space:** one or multiple rooms required, depending on the chosen approach. If its implementation will involve splitting into working groups, multiple rooms might be required (2-3), in order to have one working group per room.

### **Sequential Backcasting**



### Description

This instrument emphasises envisioning a preferred outcome and then determining the necessary actions and enabling factors needed to make that vision a reality. The tool works backwards, as it starts from the future and imagines the steps needed along the way until the present moment and situation. Moreover, it involves working in a structured manner to identify and imagine actionable steps needed for the desired transformation in the envisioned future.

The tool can help in setting a bold future goal to drive innovation and more unconventional solutions, pushing organisations who implement it to more ambitious improvements.

### Steps

- 1. Vision creating we must start with the end in mind: What is our desired future? What is our long-term goal?
- 2. Describing the current situation and context we start understanding where things are at in the present moment in relation to the envisaged image of the future. This step also involves a mapping of the relevant stakeholders and their roles and relationships.
- 3. Identifying driving factors driving factors refer to mega trends (e.g., climate change, demographic shifts, digitalization and technological disruptions etc.) that can influence and shape the context and our desired future scenario.
- 4. Backcasting What are the events that must have happened and the things that must have been achieved to reach that preferred future? In this step, we divide the timeline between the present moment and the moment of the preferred future step, into a sequence of phases, starting with the present moment as a first phase, having a series of intermediate phases. and ending with the moment of the future situation. Then, the respective phases must be described in detail to get a good understanding of what needs to happen (milestones) at each step in the process.
- 5. Identifying needed actions and building an action plan -the identification of actions that can be taken in each of the previously identified phases and the design of an action plan/a roadmap of actions. The plan must be actionable and include information on concrete steps and milestones, as well as on who needs to implement them and how stakeholders should relate to each other.

### **Benefits**

Backcasting is particularly useful when a clear and desirable future state is envisioned but the path to achieving it is uncertain. It helps for developing sustainable strategies, a roadmap of actions, building a shared future image, identifying gaps, challenges and relevant stakeholders and their relationships and enhancing decision-making.



### **Delphi Method**

The Delphi Method is a consultation process which structures group communication processes to gather opinions from a variety of experts. It involves survey responses in iterative rounds which will lead to the ranking of the issues of strategic importance.

**Delphi** is a consultative process utilised to collect opinions from a diverse group of subject experts regarding the future and to prioritise strategic issues of importance. **Output:** A series of ranked topics that need to be addressed

**Outcome:** Engaging a team of subject experts who can act as supporters for the project.

The main drawback of the tool is its lengthy process. Also, the method favors consensus over individual opinions, which is seen as more accurate. The risk level is medium, requiring expert negotiation in later stages.

It varies but can take several weeks up to months, as one needs to wait for the expert answers after each round. The panel is made up of subject experts who are selected to represent a wide spectrum of opinion.

The optimal size is 12 to 18 people. You may want to widen participation in later stages, or even to repeat the exercise with different groups. If the consultation process is carried out online, it may involve as many experts as possible.

Delphi can be used together with horizon scanning.

**Resources** 

Materials and Equipment: An online software that can deliver the process that you want.

Number of facilitators for the panel: 1

Level of facilitation: Experienced

### **Delphi Method**



### Description

The method aims to generate an expert consensus opinion, by mitigating factors that can introduce biases in face-to-face expert conferences, such as dominating views or personalities or the reluctance of someone to change their opinion in public. Its key characteristic is the use of several iterations of anonymous questionnaires that include forecasts and reasoning.

The method first establishes a panel to deliver an initial view which will serve as the reference point for the survey.

Contributors to the group analysis can see the consultation results in real time. The process is run in a series of rounds, until an agreed upon answer is achieved.

### **Steps**

Panel engagement;

- 1. First round of the survey and the first consolidation of the outputs within this round, the experts are invited to submit their initial responses based on the panel's findings or the initial questions formulated by the organiser;
- 2. The most important ideas are identified and ranked;
- 3. The ranking leads to highlighting the priority issues;
- 4. The results are consolidated in a workshop with the initial panel.

### **Benefits**

The method's primary advantage lies in its capacity to clarify the reasons for disagreements between experts. It is effective for collecting opinions from a large group of experts and to highlight the divergent perspectives on the future and the associated action plans or policies. This method is applicable when you want to fine-tune the project scope or its priorities.



### **Horizon Scanning**

Horizon Scanning is designed to concentrate on the rapid identification and evaluation of early warning signs associated with emerging technologies, threats, and opportunities within the realm of policy and strategy.

Horizon Scanning is a strategic planning technique you use to recognise and prepare for upcoming trends, technologies and influences.

**Challenges** that might appear rely on aspects such as the level of expertise, participants engagement, biassed opinions, facilitators skill and their know-how on the topic. **Output:** A detailed list of new trends, challenges, and change drivers. It will produce reports and briefings that simplify complex data into clear, actionable insights.

**Outcome:** Better decision making, enhanced strategic planning, focused innovation, and long-term vision development.

The time and effort for horizon scanning vary, influenced by the project's scope, available resources, and goals, ranging from weeks to years. Horizon Scanning is a continuous, evolving process requiring regular updates and adjustments to effectively identify and respond to new trends and challenges. Horizon scanning project participants vary with the project's goals and context, but diversity is key for wide perspectives. Depending on complexity and resources, participants can include experts, decision makers, stakeholders, strategy teams, consultants, researchers, and community groups.

Horizon Scanning can be closely related to Scenario Planning, SWOT Analysis, Risk Assessments, Market Research.

#### Resources

**Using Horizon Scanning** requires a combination of resources, including equipment, facilitation and expertise.

The **facilitation Team** should be made up of some experienced facilitators to guide the horizon scanning process. Your facilitators should have some expertise in group dynamics, strategic planning and horizon scanning experience.

You can also make use of **traditional and social media** for collecting information and tools like, Pearl Trees, Flipboard and Pinterest to organise and gather your insights in one place.



### Description

Horizon Scanning is a strategic foresight tool that aims to explore and understand the future. Its main goals are to anticipate forthcoming changes and provide decision makers with the knowledge needed to make informed choices. It encompasses a wide array of future aspects, from emerging technologies and economic trends to societal shifts, environmental sustainability and political developments.

It does not aim at making predictions, but to identify innovative ideas and patterns of change, being more oriented towards a "heads-up" approach for those weak signals that might lead to significant trends transforming the future.

The underlying concepts involve continuous monitoring, data collection and analysis, trend identification, scenario development, and risk assessment.

### Steps

- 1. Identify the need and the purpose of your scanning effort and about the specific aspects of the future that you want to explore, in order to gather the relevant information about the emerging trends, their impact and to engage the proper audience that would bring forth a diverse mix of opinions;
- 2. Collect relevant information through various instruments such as: surveys, workshops, interviews, desk research, but always keeping in mind that you have to think outside your comfort zone and not to let yourself be constrained by traditional sources of data;
- 3. Analyse the information. Clearly convey the importance of scanning and consider the findings together, rather than just on their own, beware of both opportunities and risks and sincerely internalise what can and cannot be changed;
- Use the findings and also be prepared to continuously perform data scanning and collection as our world is overwhelmingly transforming, thus you could set up a process of constantly checking what is going on in the world;
- 5. Validate your data and prioritise the information relevant for your aims, keeping in mind that some trends will have a shorter or a lasting significance.

### Benefits

This instrument is useful for gathering impactful data and anticipating emerging trends. By providing insights into potential scenarios, Horizon Scanning helps make informed and strategic decision making, ensuring that organisations are well prepared to adapt and thrive in an ever-changing landscape.

Horizon Scanning also benefits risk mitigation by identifying and addressing potential risks well in advance. It also helps with resource optimisation, helping communities allocate their resources effectively and maximise their impact.

# Trends Identification & Analysis

### Trends Identification and Analysis systematically analyses past and present trends across various fields to predict future changes, enabling informed strategic decisions.

Trend analysis is a technique used by communities and organisations to predict future trends and opportunities according to data collected. It tries to predict an upcoming trend, and then will ride that trend until data suggest a trend reversal.	Output: Future sustainability trends analysis and scenarios showing possible outcomes. Outcome: Insight into upcoming trends, challenges, and opportunities for informed decisions and strategic planning.	When conducting any sort of trend analysis, you should involve a diverse group of participants who can collectively contribute to understanding, planning, and implementing your sustainable efforts, such as community leaders, sustainability experts, etc.
<b>Challenges</b> that might appear rely on aspects such as the level of expertise, participants engagement, biassed opinions, facilitators skill and their know-how on the topic.	The <b>time required</b> can vary significantly, depending on the complexity and scope of your analysis. A rough estimate would be about 2– 4 weeks for data collection and another couple of weeks to organise and analyse all your data.	It usually works well with any <b>other foresight</b> <b>instrument</b>

#### **Resources**

You will need access to **computers with relevant software, like Microsoft programmes** etc. for data collection, analysis and presentation.

You will also need access to a wide range of **data sources**, including research reports, **databases**, government publications and surveys related to sustainability, and environmental trends. As well as this you'll need to keep an eye on social media, the news, magazines, newspapers, the internet to get a closer look at what might be to come.



### Description

This tool isn't a specific one, but rather a strategic and analytical approach aimed at exploring and understanding various parts of sustainability. It involves a structured process to uncover, analyse and respond to emerging trends and dynamics related to your topic.

In contrast to horizon scanning, this approach does not look for weak signals but at wellestablished ongoing dynamics, to comprehend the direction in which a particular phenomenon, industry, technology or societal aspect is evolving.

### Steps

- 1. Define your objective and scope;
- 2. Collect and process data and identify the sources of information. This also implies removing any duplicate or inaccurate information and ensuring that the data is consistent and ready for analysis;
- 3. Identify emerging trends, focusing on understanding them as challenges or opportunities. Categorise them based on their relevance to your goals;
- 4. Plan and strategize and based on this action start to set clear goals and actions to align all these emerging opportunities to your needs and, on the same time, limit any potential threats;
- 5. Share your findings with the relevant stakeholders to gain support and raise awareness.

### Benefits

By understanding trends, you can anticipate changes in demand and adapt your services or products accordingly and help you identify patterns and relationships between different key actors.

The early detection of changes can provide a competitive advantage and allow for a proactive response to any potential challenge. It is also supportive for informed decision-making, risk mitigation, opportunity identification and prioritisation and scenario planning correlated to proper resource allocation.



### Visioning

# As the name suggests, Visioning is a process of developing a shared vision for a preferred future, co-owned by the stakeholders involved and based on a common set of aims and objectives.

**Visioning** is a foresight tool used to create a shared, longterm plan by involving diverse stakeholders in an inclusive process.

Challenges in a visioning process include limited data availability, the risk of oversimplifying complex issues, potential biases, group think leading to consensus over quality, being time and resource-intensive, and creating visions that are either lacking in detail or unrealistic, making implementation challenging. **Output:** A shared vision for the future, namely a detailed account of your desired future, coupled with the action plan to help achieve it. **Outcome:** working towards a common set of objectives. This collective vision dismisses the risk of further disagreement, since all conflicts have been talked upon.

A standard Visioning workshop takes **2 to 3 hours**, covering introductions, discussions, reflections, and summarising. Complex exercises may require multiple sessions. Effort: Moderate to high, with preparation needed for materials like boards, cards, and markers. For your Visioning process, include **activists**, **leaders**, **experts**, **and community members** for a balanced vision. Ensure the core group is passionate and include leaders for support. A group of 5 to 10 people allows for diverse views without being too large to manage.

Visioning goes well with **Scenario building** 

#### Resources

You will need visualisation boards, flip charts, coloured cards, markers, tape, projector or Mural/Miro/Google slides for the online events.

Evidently, the whole process is guided by experienced facilitators with diverse backgrounds.

### Visioning



### Description

Visioning is the collaborative process of creating a clear roadmap for an ideal future. It involves identifying key stakeholders with vested interests, who then discuss and agree on goals. The next step is developing a detailed vision aligned with these goals, depicting the world's transformation and the systems supporting it. This vision is a narrative representing collective aspirations, not a one-time effort but an evolving guide for strategic decisions as situations change or new information emerges. It serves both as an inspirational goal and a practical guide for stakeholders

### **Steps**

- 1. Identify stakeholders;
- 2. Choose approach The approaches can be: Analytical, Interview method or Creative visualisation;
- 3. Conduct the exercise through:
  - Analytical Approach: stakeholders should provide detailed features about their preferred future.
  - Interview Method: A facilitator quickly asks a series of questions to build on the input from the analytical approach.
  - Creative Visualisation (optional): Stakeholders close their eyes to visualise the future, then write down or discuss what they saw.
- 4. Group work In this phase, participants start to define a shared image of the future;

**5. Generate ideas about the vision and test the result** – the vision should include all kind of elements; even less desirable ones and it should answer to the following questions (this is a list of possible questions; any other ideas are well suited):

- What value does this change bring?
- What are the risks of this transition?
- What happens if the transition fails?
- How does this fit with our business model and service areas?
- What internal tensions and opportunities should we be aware of?
- What stakeholders should be involved in the process? Who benefits or not from this vision?
- What are the challenges the vision tackles?
  - How do we evaluate and monitor the success of the vision?

6. Finalise and communicate the vision.

### Benefits

This instrument is useful for helping stakeholders agree on what a successful outcome looks like. The tool encourages informed and strategic decision-making by facilitating a collective and sustainable vision. It also serves to set priorities and action plans. Visioning contributes to risk assessment, enabling groups to identify and confront potential environmental risks early on. Additionally, it aids in the effective allocation of resources, helping young people maximise their impact with the resources available to them.

# Weak Signals and Wild Cards

Weak Signals are early, often overlooked signs of trends or changes that impact strategy and decision-making. Wild Cards are unexpected, rare events that disrupt and require organisations to swiftly adapt to maintain operations.

A **wild card** is a lowprobability, large-effect event that might constitute a turning point in the evolution of a certain trend or system.

Wild cards may or may not be announced by **weak signals**, which are incomplete and fragmented data.

Assessment time for weak signals and wild cards varies with project complexity, participants, and analysis depth. **Output:** Prioritised indicators for potential impact, generating specific scenarios.

**Outcome:** A forward-looking approach embracing alternative views and understanding key change drivers. Early detection of weak signals reduces uncertainty and aids decision-making.

The duration and effort for assessing weak signals and wild cards depend on project complexity, participant number, analysis depth, and resources. Workshops may last from half a day to several days, with preparation and post-workshop analysis extending over weeks to months. It's advantageous to include a **diverse** group in discussions, such as decision-makers, experts, stakeholders familiar with your organisation, people with fresh perspectives, facilitators, data analysts, and strategy specialists.

A popular use of Wildcards is within the development of Scenarios building or Backcasting.

#### Resources

The minimum of equipment needed are **meeting spaces**, audio-visual equipment, computers and internet access, whiteboards and flip charts, note-taking tools.

Facilitators should ideally be trained in the specific methodology being used in relation to this one, whether it's scenario planning, horizon scanning, or another foresight approach.

### Wild Card and Weak Signals



### Description

The notion of **wild card** describes an event with a low probability of occurrence and a high impact of influence. There are different types of wild cards: nature-related (e.g. a tsunami), unintentional results of human action (e.g., an accident) or intended results of human action (e.g. terrorism). Some of them are completely unknown in advance, some are known by part of the population (scientific environment for example), and some are listed as a possible event but with a negligible probability of occurrence. Note that wildcards are different from trends. Trends have a degree of acceptance and "legitimation"

whereas a wildcard might well blow a trend right out of the water with its sudden arrival.Weak signals are past or current developments of issues with ambiguous and diverse interpretations

**Weak signals** are past or current developments of issues with ambiguous and diverse interpretations regarding its origin, its meaning and its implications. They are unclear but they might represent warnings about future events.

The timely identification of weak signals leading to unprecedented events could significantly reduce the uncertainty and support decision-making processes. It gives organisations time to adapt, enhance their management decisions for strategy development, often in innovative ways, and allow them to avoid unnecessary surprise effects. Wild cards and weak signals are not precisely a method. They are more of a tool that brings added value to a method or process being used.

### Steps

Identifying wild cards is possible thanks to methods such as a **STEEP analysis** looking at the relevant parts of global trends (Social, Technical, Economic, Ecological, Political) to classify wild cards.

The Reference-Impact Grid (RIG) is a valuable tool for assessing issues raised by wild cards, particularly in the context of youth-serving organisations and the low-carbon transition. This grid helps you evaluate the potential impact of wild cards from various perspectives. Here's how to use it effectively:

- Start by identifying the key stakeholders and perspectives relevant to your topic. These may include internal perspectives (e.g., organisation's leaders, staff, and members) and external perspectives (e.g., community, funders, governmental bodies, and environmental organisations).
- Create a grid with perspectives on one axis and potential wildcards on the other.
- For each cell in the grid, assess the potential impact of the wild card on the identified perspective.
- Analyse the implications of the assessed impact. This involves considering both the immediate and long-term consequences of the wild card from each perspective.
- Based on the assessment, prioritise the wild cards that have the most significant potential impact.
- Develop mitigation and contingency plans to address the identified risks and capitalise on opportunities. These plans should be tailored to each perspective and may include adjusting strategies, resource allocation, and communication efforts.

The key to identifying weak signals is to remain vigilant, open to unconventional sources of information and committed to a continuing process of monitoring. Pay attention to emerging trends unconventional viewpoints, and minor incidents that could hint at significant changes. Another approach to scanning the environment for changes is the use of an expert panel.

### Benefits

These tools help organisations plan for unforeseen disruptions and build resilience. Youth-service groups can use weak signals to develop programmes aligned with sustainability trends. They are mainly used in scenario planning, encouraging open-mindedness and preparedness, and inspiring action plans for various outcomes.

### **Road Mapping**

Roadmapping is the method that combines various steps – actions, strategies, regulations, policies, resources – needed to achieve a preferred future. It creates a plan that outlines the anticipated future developments, trends and milestones in a specific area.

This tool is employed to comprehend the necessary changes required to transition from the present to the future. It is utilised to formulate an action plan aimed at guiding efforts toward achieving that envisioned future. **Output:** Identifies differences between the desired and current states, key features, milestones, and challenges affecting the journey from A to B, and major change drivers like trends and new technologies.

**Outcome:** Insights into event sequences, decision connections, and critical paths to the future.

Users may encounter challenges related to data availability, complexity, and potential biases. In some cases, gathering precise data for forecasting can be challenging, leading to potential inaccuracies in the roadmap. This exercise takes **1,5 hours** minimum. **Plan 2 to 3 hours** if you want to take time for discussions and research. Extra time is needed after the exercise to provide a final visual document to support planning and communication and to present and review your roadmap with experts to verify its assumptions. Participants should be representative of the different types of stakeholders and expertise to create credible and plausible futures. A roadmap can be done rapidly alone or as part of a larger, groupbased project depending on the final objective. Ideally, between **5 and 20 people.** 

Roadmapping can be done in relation to any other foresight tools.

#### Resources

#### Material and resources:

- One facilitator
- Whiteboard, wall- or flipcharts (at least one flipchart per group), sticky notes, pens and markers
- Projector, screen; Mural/Miro/Google Slides for hybrid or online workshops
- Two templates, one timeline and one roadmap



### Description

Road mapping provides a comprehensive perspective, allowing individuals to grasp the intricacies involved in effectively planning and executing a future development objective, program, or strategy. This includes understanding the interconnections among different elements of the program, policy, or strategy, as well as recognising the evolving roles and interests of various stakeholders essential for achieving the goal

### **Steps**

1. Introduce the tool and focus – explain its utility, agree on the level of focus and present the preferred future goal that you desire to have a road map for, the scope, the time horizon and the relevant stakeholders that need to be involved and their relationships;

2.Understand w here you want to go, namely use a timeline template to map the key elements that differentiate the future from the present day;

3. Identify key drivers, events and technologies that might have a significant impact on your scope;

4 .Connect all the elements to start building your road map, considering the most valuable factors that have been discussed, the right order timewise, the level of certainty, also thinking if you are missing any other elements;

5. Develop your action plan and priorities, focusing on milestones, key stakeholders, obstacles, and short-term and long-term actions;

6. Compile your output into a friendly report that strategically communicates your road map.

### Benefits

You can use this tool to identify changes and the specific steps and actions that are required for achieving a certain objective, to map various components, to understand their complex connections, to build an encompassing picture of a development programme, strategic or policy goal.

Use the Road mapping tool when initiating sustainability projects, strategic planning, grant applications, and continuous monitoring of progress. It fosters clarity, alignment with sustainability goals, resource planning, stakeholder engagement, and adaptability, empowering organisations to grow and strategically position themselves in various contexts.



# **Case Studies**



YOUTH FOR FIT

### **Case Studies**

For you to better understand how one might use foresight in real life activities, here you can find a series of case studies from different countries, with various aims, outputs, target groups and beneficiaries and, evidently, using a diversity of foresight methods.

So, check out the following use cases and use them as best practices for your envisaged foresight activities!

### **Context and Background**

UEFISCDI coordinated the National Research & Development Strategy and the Strategic Research Agenda, which proposes thematic research priorities, related to societal changes and the communities' burning issues. The series of workshops aimed at engaging lay people to the planned strategy development, to validate, enrich or reformulate the research priorities set by the Strategic Research Agenda (part of the RD Strategy), to align the authorities' and experts' findings to citizens' needs.

The intended result was for the participants to explore and describe an alternative future (scenario) that would resolve some of the hot issues burning within their community. The discussions were held in an informal and friendly setting (world café) fit for the audience.

### **Results and Insights**

Participants not only confirmed the experts' findings but produced a new challenge that was added to the strategic document. The foresight tools helped them imagine potential futures (focusing on various challenges) and thus produce the key requirements that would pave the way to those desired futures. The advantage of using these tools was that the whole setup and procedure was friendly, easy to relate to and gradual enough, for them to leisurely understand what a research priority means and how research and innovation may contribute to addressing societal problems.

#### Impact

The foresight exercise had a twofold impact.

- It proved that citizens are (a) truly interested in societal issues, (b) they understood the provided input, (c) the difference between any given solution and solutions underpinned by research activities; (d) it was possible to involve citizens in contributing to strategic documents and (e) that they had the ability to follow a foresight exercise and use it to produce the desired outcome
- The participants not only confirmed the input, but they also produced a new research priority fit for the Agenda, that, eventually, was included into the official strategic document, after the workshop results had been presented to the decisionmakers.

#### **Further considerations**

The most important challenge faced during this foresight exercise was being able to give all participants the opportunity to talk freely and express their opinion, or even start a debate while abiding by the rules of polite engagement. Experienced facilitators and the friendly and easy to understand format provided the perfect setup to overcome that challenge.

Possible improvements could be a simplified procedure - however, this depends on the specificity of the input documents, the desired outputs and the allocated time and resources.

### **Case Study Overview**

The organiser was a governmental body - UEFISCDI – The Executive Agency for Higher Education, Research and Innovation Funding – which manages funding for research and innovation activities and the expected output was meant to serve national decision makers to update a national strategic document on research and innovation policies.

The objective was to test the possibility of involving citizens in the development of national, strategic documents and, also, to test the capacity of citizens to engage and understand research topics and, thus, get feedback, improve and collect new ideas on the topic.

### Methodology

Two workshops with 30 participants each - laypeople - selected based on a fair distribution according to gender, age, geography and level of education.

- Input the Strategic Research Agenda, namely two specific domains addressed by the document.
- Five thematic working groups discussing societal challenges in relations both to research and innovation practices and their own needs and interests as members of the community;
- Each group produced a series of thematic challenges/topics, based on a given structure and presented them in the plenary session and they were subjected to a general vote, thus shortlisting the first ten topics according to the participants' preferences.
- 4. Those 10 topics were allocated to the five table groups (2/table) and the group discussions were resumed. Each group provided a detailed description of those two subjects according to a given template that focused on how the specific thematic future would look like and what sort of solution might the research activity provide, to solve the problems and reach the desired potential future.
- 5. The development of the narrative from the previous stage consisted of table groups changing places two times, so that the initial narratives could benefit from the input of almost all participants. The new-comers would work on the frameworks developed by the previous group and add on their own insights and opinions.

6. The extended 10 topics were put to a vote and a hierarchy of the most burning issues, susceptible to solutions delivered by research activities, emerged.

#### **Context and Background**

The background set by the project was the elaboration of a Blueprint that would guide the National Research Institutions to strategically position themselves within the national and international research and innovation context.

Hence, a series of four online foresight workshops were organised to help the Research Institutions produce potential collaborative projects that would address various challenges and needs and help them develop and strengthen their national (or international) position within their area of expertise.

#### **Results and Insights**

Each working group within the four workshops generated project ideas that involved the participant research institutions. Moreover, these ideas were directly related to the strategic documents and to the future funding opportunities, but, in the same, innovative, future oriented, linked to actual needs and highlighting the institutions' capabilities.

#### Impact

Sequential Backcasting was useful since it led participants to first think about the future and then take one step back and envision the present context, potential solutions and their institutional position within this picture. Using this foresight tool helped the researchers to delve into the ways they could correlate their capabilities to develop collaborative project ideas.

#### **Further considerations**

The biggest challenge was managing different working groups online. Also, participants' engagement feels different in an online context. However, the procedure was clearly explained, and participants were guided through it by experienced facilitators. It was also important that the facilitators were familiar with the national research area and the input documents.

Possible improvement could be an easier procedure, since these workshops also involved a series of activities and interaction with the participants prior to the actual workshops.



### **Case Study Overview**

The organiser was a governmental body - UEFISCDI – The Executive Agency for Higher Education, Research and Innovation Funding – which manages funding for research and innovation activities. The objective was to support National Research Institutions in collaborating for project ideas and initiatives aligned with the requirements set by the National Strategy for Research, Innovation and Smart Specialisation.

### Methodology

#### **Smart Specialisation**

Four thematical online workshops with 20-30 participants split into three working groups. Participants came from the research area, voicing the interests of their National Research Institutions.

Miro board was the online tool used for the working groups.

- Input the Strategic Research Agenda, namely two specific domains addressed by the document;
- Pre-workshop activities: The participant researchers were distributed to the four thematic workshops according to their area of expertise. Each workshop had three working groups and participants were assigned to the working groups based on their preferred topics;
- Inside the working groups, researchers chose one challenge that fit within their institutional interest and area of expertise. Relying on the Backcasting method, participants drew a vision of the future deeply connected to the identified challenge, the drivers of change, supportive factors and obstacles;
- 4. Everyone took a step back and described the current situation and identified potential solutions that would tackle the challenge and lead to the desired vision. In connection to the solutions, each research institution representative shared their potential institutional role, the capabilities, skills and resources and potential improvements to turn the solution into feasible projects;
- 5. The final step was the development of a collaborative project idea that was presented to all groups, to collect feedback or other contributions to enrich the initial idea.

### **Context and Background**

The aim of the exercise was:

- To elaborate the context analysis and the related predictions on climate change in Sardinia, (via literature reviews);
- To map the stakeholders in the main sectors related to climate change mitigation;
- To analyse the decision-making processes, planning, and preventive crisis management situations (SWOT).

### **Results and Insights**

The results consisted of the setting of future possibilities, scenarios and strategies for the climate change focused on the agro-forestry and natural sectors, inland waters, and ecosystems

It also helped to map relevant stakeholders and their capacity to respond and adapt in the various sectors.

### Impact

The foresight tools contributed to have a structured knowledge of the dynamics of climate change, the prediction of its effects, the recognition of the vulnerabilities of the territories, the appropriate action, and, finally, the calibration of the most appropriate governance models, due to evaluating and monitoring the environmental performance of a territory over time.

It also led to defining the macro-objectives for adapting to climate change in the Sardinia Region and to building a governance model to adjust to climate change.



### **Case Study Overview**

The beneficiary of this foresight exercise was the Regional Government of Sardinia who aimed at elaborating two territorial plans in the field of climate change and sustainable development, namely the "Regional Strategy for Adaptation to Climate Change 2021-2050" and the "Sardegna 2030 – Regional Strategy for Sustainable Development".

The regional strategies were set up as an overview of the regional sectors, administrations and organizations involved, to assess the implications of climate change in the different sectors concerned.

The event was set to have a 10-20-year time horizon and involve some central coordination of foresight activity among departments.

### Methodology

- Literature review referring to the most recent developments in scientific literature and implemented by the most relevant international authorities. Specific cases were analysed to identify elements and factors that are universally recognized as essential in a proposed governance model;
- Scenario building was used to analyse the different vulnerabilities of the territory, the levels of economic development, and the adaptive capacity of the anthropic and natural components;
- 3. Stakeholder mapping was considered fundamental from the initial stages of construction of the strategy and, specifically, when identifying vulnerabilities and the response capacity in different sectors;
- 4. The methods used for collecting the data were questionnaires and semistructured interviews. The results were integrated into a SWOT analysis for strengths, weaknesses, opportunities, and threats of each sector (e.g. agriculture, forests, water, etc.)
- 5. The expert panel was involved in the fuzzy logic approach, used to elaborate a synthetic index of adaptive capacity for each strategic sector identified. In the second phase, the experts of the working group attributed a corresponding weight to each indicator, based on criteria of importance for the territory and the impact perceived by the stakeholders on the adaptive capacity.
## **Context and Background**

Ireland is known for its rich biodiversity, but it faces the threat of invasive alien species (IAS) that can disrupt native ecosystems and harm native species. To safeguard its unique biodiversity, Ireland initiated a comprehensive assessment of the impact of IAS on its ecosystems.

The underlying reasons they used Horizon Scanning to identify potential threats were to preserve biodiversity and align with the EU Regulation.

It also enabled early identification and ranking of potential IAS threats to Ireland's Biodiversity, allowing for timely and targeted intervention and providing guidance for the allocation of resources for prevention and management.

The tool provided a structured and collaborative approach involving experts from various fields, ensuring comprehensive risk assessment.

#### **Results and Insights**

The tool successfully identified and ranked a list of high-risk IAS likely to arrive, establish and impact native biodiversity in Ireland over the next ten years. This allowed for timely intervention and management efforts and helped allocating resources effectively for monitoring, control, and eradication efforts.

#### Impact

The implementation of Horizon Scanning for IAS in Ireland, led to the identification of high-risk threats, informed decision making, and proactive management strategies. It provided valuable insights into potential future challenges enabling Ireland to take steps to protect its unique biodiversity.

### **Further considerations**

Involving a diverse group of experts from different biomes and regions (both Republic and Northern Ireland) allowed for a comprehensive assessment of invasive species risks across different ecosystems.

The scanning followed a structured methodology that incorporated individual scoring, group discussions, and consensus building. This approach helped ensure that the process was transparent and well-organised and endorsed openly expressed opinions, contributing to a more informed decision-making process. Areas for improvement:

- Ensuring that all experts have access to the same data sources and that their assessments are based on consistent and high-quality information.
- Improvements in communication, especially between expert groups and during consensus building, would enhance the effectiveness of the process.
- Establishing a feedback loop that allows for continuous improvement of the methodology based on lessons learned from previous exercises.



# **Case Study Overview**

The workshop focused on the identification of emerging invasive alien species with the potential to threaten biodiversity in Ireland. It aimed at contributing to Ireland's obligations under EU regulations to pinpoint species likely to emerge, establish and impact on native biodiversity within a ten-year time span (2017-2022).

The process was carried on through Horizon Scanning, whereby individual species were systematically assessed in relation to their threat to the biodiversity. Using Horizon Scanning also provided valuable ideas and insights into assessing any potential risks of IAS threats before they become established. The early warning system was crucial for preventing the introductions and spread of harmful species.

# Methodology

The methodology used involved a multi-phase approach with a diverse group of experts.

- 1. Data Collection and Preparation it began with the compilation of existing IAS lists, including those from previous Horizon Scanning exercises. Expert working groups (7-8 persons) were given a list of potential IAS relevant to a specific environment: terrestrial, freshwater and marine. They were encouraged to review and supplement these lists with additional IAS based on their expert opinion. Their assessment was based on various factors (likelihood of arrival, establishment, and impact on biodiversity). They then created a standardised grid/template that they used to ensure consistency in data collection;
- 2. Workshop The expert groups discussed and refined the scores assigned to the species within their respective environments. Consensus was then achieved through these group discussions, and scores were adjusted, considering arrival, establishment and impact. The workshop concluded with a plenary synthesis session, determining the top-ranked IAS likely to arrive, establish and impact native biodiversity in Ireland over the next ten years.

# Under Pressure: Visioning in a Regulated Environment – United Kingdom

#### **Context and Background**

The context was set by privatisation of the utility industries, back in the days, which required a strategic realignment and a change in organisational culture. Amidst this transformative period, the role of a clear organisational vision became pivotal. It offered much-needed strategic direction and served as a navigational aid. The research aimed to delve into the intricacies of how visioning practices were shaped by the privatisation wave.

The study primarily concentrated in helping companies articulate their raison d'être and set a course for future strategies and decision-making. These strategies became vital as companies recalibrated their goals, cultures, and priorities in the wake of privatisation. The research set out to scrutinise how these visioning practices were influenced by the changes.

#### **Results and Insights**

The case studies showed that going from public to private ownership made things more complex and brought new players into the mix, hence the importance to have a clear vision to help steer the company and shift its culture during these changes. Most companies had senior teams leading the visioning efforts, but, interestingly, staff from the utilities sector were more open to this visioning process than those in financial services, possibly because of their background in public service.

In short, having a vision helped these companies get through tricky changes, although there were some challenges with getting everyone engaged and informed.

#### Impact

The research shed light on how essential it is to have a vision, especially when the industry is going through big changes. It pointed out specific hurdles, such as dealing with regulators, or getting everyone involved and informed, highlighting the need for a vision that includes everyone. The study also showed how tools like balanced scorecards can help link a company's vision to real-world results.

Overall, the findings can help companies, researchers, and policy makers create more effective visioning processes and communication strategies, especially in times of major change and uncertainty.

#### **Further considerations**

Despite speaking to multiple experts and comparing different cases to find meaningful insights, the small number of companies studied means we can't say for sure that these findings apply everywhere. Adding perspectives from other staff members could make the picture more complete. For future work, it might be good to include different kinds of data, or even to track how visioning plays out over a longer period. Comparing publicly owned and privately-owned companies could also reveal some interesting differences.

This study is a good start for understanding the tricky business of visioning when things are uncertain. It points the way for future research to broaden the sample, dig deeper into the data, and track outcomes over time.

# Visioning



# Case Study Overview

The research was conducted on four electricity and water utility companies in the United Kingdom. The goal was to study how the practices of corporate visioning were influenced by recent privatisation and introduction of industry regulation in these sectors. The research examined factors like the need for a vision, vision development process, communication, staff attitudes, and linking vision to success measures.

These companies had recently transitioned from public to private entities and were now operating under new regulatory regimes. The case studies aimed to provide an in-depth understanding of how these major industry changes affected their visioning practices.

# Methodology

- Data Gathering Primary data was sourced through comprehensive, semistructured dialogues with high-ranking managers from each firm and supplementary data was gleaned from both internal company records and external resources;
- 2. Participants In each of the four firm, several senior executives intimately linked with visioning initiatives were interviewed;
- 3. Methodological framework A qualitative case study approach underpinned the research. This deep dive followed an initial broader survey, refining the focus to achieve a nuanced understanding.;
- 4. Execution predetermined list of topics, including facets of the visioning process, communication strategies, attitudes, and implementation tactics. In addition to interviews, a meticulous review of relevant documents was conducted. Data was initially scrutinised within individual case studies, followed by an overarching pattern search across multiple cases
- 5. Analytical procedure Data extracted from both interviews and documents underwent an iterative analysis. The findings were further analysed through comparison with different cases. The insights were continuously contextualised by referring to existing theories and literature on visioning.

### **Context and Background**

The reasons for creating and using the foresights tools were to address critical challenges related to the future of food systems, agricultural land use, and nutrition security in a rapidly changing world. The tool was employed to explore a range of potential scenarios and assess their implications for various aspects of the food system.

#### **Results and Insights**

The tool created a set of diverse scenarios for the future of global food and land use systems, each with distinct assumptions regarding diets, urbanisation, and regional food production and insights into how different pathways might affect land use, agriculture, and food security. It highlighted the role of urbanisation, lifestyle changes, and food supply chains in shaping dietary trends, thus introducing a "healthy diet" scenario based on World Health Organization guidelines. This scenario illustrated how dietary changes could contribute to improved food security and nutrition.

Agrimonde-Terra offered alternative scenarios like "Regionalisation," which explored the reconnection of food production to regional cultures, and "Communities," which considered a 'perfect storm' scenario involving climate, ecological, and economic crises.

#### Impact

By providing a framework for creating scenarios, linking qualitative narratives with quantitative assessments, and offering a range of alternative future pathways, the Agrimonde-Terra tool enabled a deeper understanding of possible futures in food and land use systems.

It informed discussions, research projects, and decision-making processes by offering insights into the potential challenges and opportunities in achieving sustainable and healthy food systems, which leads to informed strategic planning and policy decisions.

Decision-makers were exposed to a wide range of scenarios, each with its own implications. By considering various scenarios, decision-makers gain a more comprehensive understanding of potential outcomes.



# **Case Study Overview**

The foresight study Agrimonde - Terra was meant to build global scenarios linking land use and food security, with special attention paid to overlooked aspects such as nutrition and health, to help explore the possible future of the global food system.

Agrimonde-Terra proposed five contrasting scenarios of land use and food security in 2050 that comprise elements such as alternative diets, nutritional and health issues correlated to urbanisation and rural transformation.

# Methodology

The whole study involved around **80 international experts**, including scientific expert groups in the early stages (thematic workshops) and a scenario committee composed of 19 members (either scientists or stakeholders from international and national institutions as well as civil society) that provided guidance on scenario building. They provided knowledge and assessments about current trends and possible changes and built collective intelligence about alternative futures.

Scenario sticked to the following flow:

- Trend analysis of long-term dynamics of the drivers in the land use and food security system;
- 2. Drafting assumptions by 2050 of each driver elaborated. This also included the description of the pathways for each driver up to 2050;
- 3. Review of assumptions;
- Scenario building five contrasting scenarios were built based on extensive discussions between academic researchers and stakeholders in the scenario committee;
- 5. Simulations of land uses;
- 6. Final narratives and simulations.

Phase 5 and 6 were concerned with the quantitative assessment of the scenarios.



Foresight is the crystal ball for green projects, but one that does not rely on magic or faith. Instead of predicting the future, you can shape it using what you already know coupled with your own dreams of the future



Foresight is a strategic planning tool organisations that empowers to anticipate and respond to future trends or radical changes, to address risks and opportunities and, multiple moreover, imagine to desirable future developments, grounded both on existing elements and a degree of "wishful thinking" organisations are equipped with the necessary tools to make informed and strategic decisions, oriented towards the future and prepare them for the ever-changing landscape.

One of the primary reasons for incorporating foresight techniques into sustainability and environmental issues lies exactly in the inherently dynamic nature of this realm. Climate change, zero-carbon goals, resource consumption, etc. necessitate a forward-thinking approach that goes beyond the current and immediate concerns.

Foresight is a proactive instrument that support organisations anticipate emerging technologies, policy shifts and even consumer preferences that may have a say in the success or failure of green projects and assist them in aligning sustainability goals with societal needs and interests, thus strengthening the social impact and long-term relevance of these projects. Foresight provides the perfect context for the interaction and open dialogue between various stakeholders, such as policy makers, experts, communities, etc., thus ensuring a wide collaborative approach to environmental and sustainability issues - any shared output has the privilege of ownership and accountability from everyone involved.

We should not forget that, to develop a potential picture of the future, we need a sense of creativity and thinking outside the box, resulting in fresh ideas and perspectives, which may be considered a prerogative of the youth.

Foresight instruments are versatile enough to empower organisation to through challenges navigate and opportunities, such as the Green Transition or the Digital Transformation, so they are relevant for projects focused on environmental sustainability, because this topic is, by its nature, extremely dynamic and young people are more inclined to remain agile, informed and flexible in such a rapidly changing world.

In a nutshell, by integrating foresight into their strategic planning processes, organisations can proactively drive sustainable change, ensuring that their efforts remain relevant and impactful.





Grab those foresight lenses, spot the green trends on the horizon and let's turn sustainability into more than just a wishful thinking let's make it a planet-saving mission!

# References





# **Reference List**

- Bourgeois, R. (2015). A Glossary of Terms commonly used in Futures Studies.
- European Commission (2020). Communication and roadmap on the European Green Deal. <u>https://eur-lex.europa.eu/legal-</u> <u>content/EN/TXT/?qid=1576150542719&uri=COM%3A2019%3A640%3AFIN</u>
- European Commission, Fit for 55, <u>https://www.consilium.europa.eu/en/policies/green-deal/fit-for-55-the-eu-plan-for-a-green-transition/</u>
- Georgieva, Kristalina, International Monetary Fund Managing Director (2022). Navigating a More Fragile World speech. October 6. <u>https://www.imf.org/en/News/Articles/2022/10/06/sp-2022-annual-meetings-curtain-raiser</u>
- https://doi.org/10.13140/RG.2.1.1600.2008
- <u>https://www.thersa.org/reports/futures-thinking-foresight</u>
- OECD, Strategic Foresight, <a href="https://www.oecd.org/strategic-foresight/whatisforesight/">https://www.oecd.org/strategic-foresight/whatisforesight/</a>
- Shallowe, A., Szymczyk, A., Firebrace, E., Burbidge, I., & Morrison, J. (2020). A stitch in time: Realising the value of futures and foresight. The RSA.
- Statista (2023). Share of urban population worldwide in 2022, by continent. <u>https://www.statista.com/statistics/270860/urbanization-by-continent/</u>
- United Nations. Global Issues: Climate Change. <u>https://www.un.org/en/global-issues/climate-change</u>
- United Nations. Global Issues: Population. <u>https://www.un.org/en/global-issues/population</u>
- Winston, A.S. (2019). The World in 2030: Megatrends to Watch. Retrieved from https://sloanreview.mit.edu/article/the-world-in-2030-nine-megatrends-to-watch/



# **Further Reading**

- Asian Development Bank (2020). Futures Thinking in Asia and the Pacific. Why Foresight Matters for Policy Makers. DOI: <u>http://dx.doi.org/10.22617/TCS200126-2</u>
- Asian Development Bank (2021). How to Implement Strategic Foresight (and Why). <u>https://www.imf.org/en/Publications/analytical-notes/Issues/2021/12/22/Strategic-Foresight-at-</u> <u>the-International-Monetary-Fund-463660</u>
- Center for Security Studies & ETH Zurich (2021). Risk and Resilience Report. Strategic Foresight. Knowledge, Tools, and Methods for the Future. Zurich. DOI: 10.3929/ethz-b-000505468. <u>https://css.ethz.ch/en/publications/risk-and-resilience-reports.html</u>
- Engasser, F. (2023). Top ten toolkits for futures. Retrieved from <a href="https://www.nesta.org.uk/feature/top-ten-toolkits-futures/">https://www.nesta.org.uk/feature/top-ten-toolkits-futures/</a>
- Global Business Network (2004). What If? The Art of Scenario Thinking for Nonprofits
- Government Office of Science (2015). The Future We Made: Birmingham and West Midlands Future Proofing Toolkit 2020–2060, available at <u>https://www.sustainabilitywestmidlands.org.uk/wp-</u> <u>content/uploads/WM-Future-Drivers-Report-Final-July.pdf</u>
- Policy Horizons Canada (2016). Module 3 Scanning in Foresight Training Manual, Online resource, available at http://www.horizons.gc.ca/en/content/foresight-training-manual-module-3-scanning
- Save the Children & School of International Futures (2019). The Future is Ours. Strategic Foresight Toolkit - making better decisions. <u>https://resourcecentre.savethechildren.net/document/future-ours-strategic-foresight-toolkit-making-better-decisions/</u>
- Turturean, C. (2011). Classification of Foresight Methods. The Yearbook of the "Gh. Zane" Institute of Economic Researches, 20, (2), 113-123
- UK Government Office for Science (2017). The Futures Toolkit. Tools for Futures Thinking and Foresight across the UK Government. Ed. 1. <u>https://assets.publishing.service.gov.uk/media/5a821fdee5274a2e8ab579ef/futures-toolkit-edition-1.pdf</u>
- UK Government Office for Science (2021). Future proof policy: A guide to using foresight in policy making. Retrieved from <u>https://foresightprojects.blog.gov.uk/2021/10/19/future-proof-policy-a-guide-to-using-foresight-in-policy-making/</u>
- UNDP (2018). UNDP Global Centre for Public Service Excellence: Foresight Manual. Empowered Futures for the 2030 Agenda. <u>https://www.undp.org/publications/foresight-manual-empowered-futures</u>
- UNDP (2022). UNDP RBAP: Foresight Playbook. New York. New York. <u>https://www.undp.org/asia-pacific/publications/undp-rbap-foresight-playbook</u>
- Other significant websites:
- <u>https://www.shapingtomorrow.com/home</u>
- <u>https://www.trendwatching.com/</u>
- <u>https://driversofchange.com</u>
- <u>https://ivto.org/foresightcards/</u>
- https://link.springer.com/article/10.1007/s11213-006-9042-4





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