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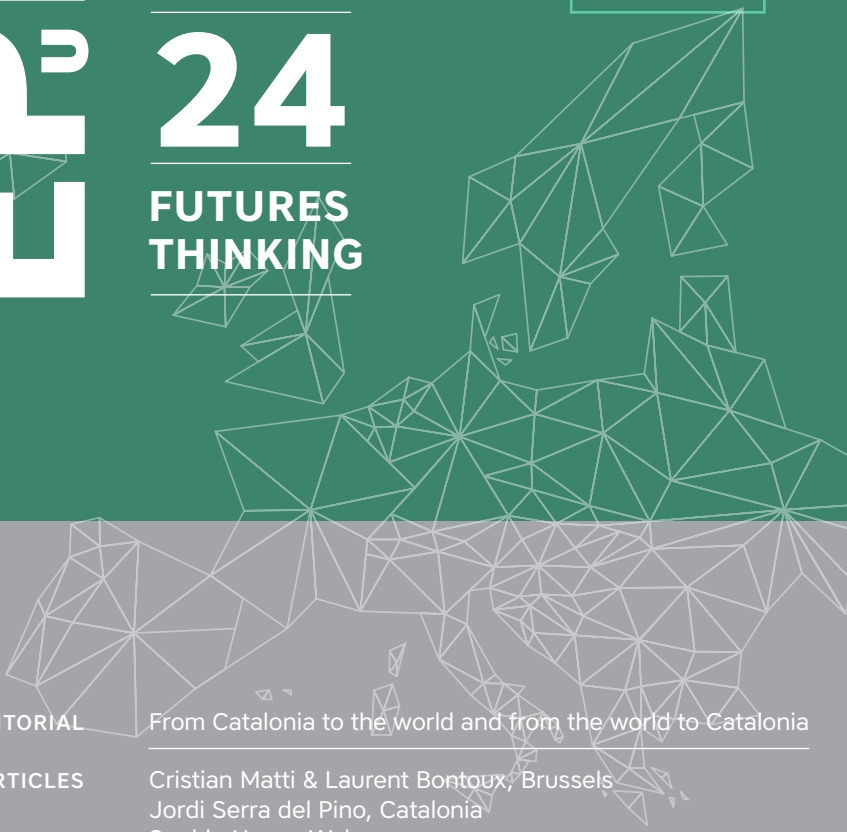
FUTURES THINKING



Generalitat de Catalunya
Escola d'Administració Pública de Catalunya

From Catalonia to the world and from the world to Catalonia

Jaume Magre Ferran
Editor

I was recently appointed director of the Public Administration School of Catalonia and, consequently, editor of the *European Public Mosaic (EPuM). Open Journal on Public Service*. I have thus taken over from Ismael Peña-López and, before him, Agustí Colomines Companys, two of my predecessors at the head of the institution and of the journal to whom I would like to transmit my gratitude and recognition. I have accepted this new responsibility with the idea of continuing with the good work undertaken over these years and with the aim of focusing on the continuous improvement and progressive establishment of the EPuM inside and outside our territory, as a publication specialised in public management. From Catalonia to the world and from the world to Catalonia.

Since 2017, this journal has consolidated itself as a platform for the promotion and dissemination of good practices, new trends and developments concerning the administration and public policies, with a clear interdisciplinary and international vocation. Having published 24 issues, we have achieved our goal of transforming it into a true mosaic of the public sector both in our country and elsewhere, because we are facing major challenges which are shared in the great majority of cases. This

gives us the opportunity to learn, unlearn and discover how the complex realities characterising our era are addressed in other administrations and neighbouring countries. Because when knowledge is shared and transferred, it is much richer and multiplies its transformative effects.

At the EPuM we have always been committed to combining the expertise of academia with the know-how of the managers and professionals in the public sector, who are in the front line every day, not to mention the necessary contributions of civil society and third sector organisations. We have also taken into account the views of experts from outside the public administration who supervise our actions and make proposals for improvement and public innovation. We often need to stand back and free ourselves from the restraints of the system in order to see clearly. And it is precisely this global network, these links from the inside out and from the outside in which benefit the final objective, which is ultimately to offer the citizens better public services, that live up to their expectations and needs.

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We have already devoted entire issues to priority and especially sensitive areas, such as social services, artificial intelligence, public procurement, citizen experience,

cybersecurity, open government, open data, institutional integrity and the use of scientific evidence to promote public policies. This has always been with the support of the competent units within the Government of the Generalitat to which I would like to convey my sincere thanks. Together we have succeeded in compiling interesting content, by prestigious experts with well-founded approaches, bearing witness to the great effort made and achievements obtained in response to multiple challenges. We also often examine the various opportunities provided by new digital tools, bearing in mind their associated risks.

Here, I would also like to express my gratitude to and emphasise the role played by the EPuM's Editorial Board, made up of people of recognised prestige and experience, who provide us with contacts, approaches and suggestions to improve the journal's quality. As you can see, the EPuM is the result of a joint effort and outlook based on networking, thanks to its inspiring multiplier effect. This has been the case right from the first issue, which we devoted to citizen participation, and it is still the case today, since it is part of our DNA.

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The edition in which I have the honour of writing these words of welcome focuses on prospective policies and *futures thinking*. In this case, we have had the close collaboration of the Directorate General of Strategy, Analysis and Foresight (Direcció General d'Estratègia, Anàlisi i Prospectiva), attached to the Generalitat of

Catalonia's Department of the Presidency (Departament de la Presidència). The result is truly excellent and inspiring, with contributions from experts in the European Commission's Joint Research Centre and other renowned and specialist voices, some from pioneering countries in this field, such as Wales in the United Kingdom. The final sections are also essential recommended reading, with a selection of good practices, new trends and news flashes which will provide you with a good overview of the issue, both if you are new to the subject or if you are more familiar with it. Particularly thought-provoking is the main interview of the issue, with the expert in innovation Alfons Cornella.

We sincerely hope that you enjoy reading this new edition. ▮

Foresight as a catalyst for systemic change and co-creation in public policy

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Abstract

Unfolding world events have made policymakers realise that the capacity to act needs to be built according to a long-term perspective under complex and uncertain conditions. This has led to a rapid increase in the application of strategic foresight to policymaking at all levels of governance. This paper examines the role of foresight in supporting public policy through inclusive co-creation processes in the face of the systemic change needed to engage in the long-term transition towards sustainability. It explains briefly how to master the diverse foresight resources available to make policy design more systemic and better able to mobilise multiple actors in a coordinated way.

Introduction

The last five years have delivered several shocking events for which most politicians and policymakers around the world were not prepared. Examples range from extreme droughts, powerful storms, and massive wildfires around the world to the COVID-19 pandemic and Russia's invasion of Ukraine. This has made many decision-makers and policymakers realise that we are now in a period in which forecasting is no longer enough. While all these events caught most policymakers unaware and unprepared, high quality foresight work was available that had considered their possibility but was ignored.

At the European level, the Green and Digital transition sets the direction for our actions and policies putting fairness at its core. Policy discourses often focus on building the capacity needed for such a transition and the need to upskill and reskill the labour force. This calls for many European actors, including governments, civil society, and businesses at every level, to jointly build anticipatory capacity to develop a long-term perspective and play their part in building the capacity to act under complex and uncertain conditions (Matti et al., 2023a). A key question public policy needs to address is how this distribution of responsibilities and capacities can best

A key question public policy needs to address is how this distribution of responsibilities and capacities can best be organised, how can we determine which actors are best able to act in which phases

be organised. In other words, how can we determine which actors are best able to act in which phases. This calls for innovation in public policy.

The last decade has witnessed a rapid increase in the application of strategic foresight to policymaking at all levels of governance and demand is increasing fast for foresight approaches that are both practical and impactful. Simultaneously, many public institutions have introduced a clear strategy to facilitate the use of strategic foresight, often starting with the implementation of simple methods into existing organisational structures (Tõnurist & Hanson, 2020; UNDP, 2022; Vinnova, 2022) before moving up in scale. At the local level, a few pioneering regions across Europe have engaged in strategic foresight (e.g. Hauts de France, Helsinki Uusimaa, etc.).

In this paper, we examine the role of foresight in supporting public policy in the face of systemic change brought about by the challenges of addressing co-creation for policy process in contemporary society. In doing so, the paper aims to highlight the need to strengthen the anticipatory capacity of public policy to engage with the long-term to address sustainability challenges and to master the diverse foresight resources available for making policy design more systemic and better able to mobilise multiple actors in a coordinated way.

Understanding systems change and the instrumental role of foresight in policymaking

The calls for paradigm shifts, increased resilience and strategic autonomy keep getting louder. This requires policy makers to work with multiple actors to draw on collective anticipatory intelligence to reflect about the long-term. The nature of the changes required also calls for different approaches to anticipation and to combine diverse skills and perspectives (Muench et al., 2022; Cagnin et al., 2021; OECD, 2023). For decision-making in this context, it is essential to have the capacity to deal with issues that are extremely complex, open-ended, and intractable, and whose nature cannot be agreed upon. In such a context, it is not possible to find clear solutions. This creates a major difficulty for traditional policymaking, which tends to be normative, thematically focused and solution oriented. It often fails (Head, 2022). The issues raised

by the urgent need to engage in the transition towards sustainability fall very much in this category (Pryshlakivsky & Searcy, 2013). To facilitate transitions, it is essential to help many actors to acquire a wide range of competences to improve their capacity to enable change and set a direction through a forward-looking perspective (Grillitsch & Sotarauta, 2020).

Strategic foresight is a discipline that applies structured and inclusive participatory approaches to build collective intelligence and reflect on the long-term future with the goal of informing decision-making today. It aims at informing present-day decisions and mobilising joint actions. It involves the application of structured and inclusive participatory approaches. It emphasizes the generation of collective intelligence concerning the medium- to long-term future and the detection of new signals of change. This process helps in identifying the factors driving change and understanding the possible future consequences of different behaviours. Importantly, strategic foresight also aids in creating long-term, desirable visions to guide decision-making and in understanding both incremental and disruptive changes (Schwarz, 2023).

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Among the techniques applied by strategic foresight, horizon scanning plays a crucial role in providing early warnings and detecting weak signals of change. It helps see the emergence of new phenomena and alerts policymakers to what is already happening. Additionally, it aids in identifying risks and opportunities, which

often depend on context and objectives. Furthermore, horizon scanning contributes to generating meaningful evidence for policy discussions, as it draws on the broad range of expertise combined through its inclusive, interdisciplinary, and participatory nature (Störmer et al., 2020).

Both strategic foresight in general and horizon scanning in particular contribute to understanding change for policymaking. They help in exploring and considering what could happen in complex systems, developing visions of preferred futures, and anchor this in the observation of what is happening today for generating policy options and setting priorities. These processes also contribute to the robustness of policymaking and inform strategy by both identifying risks and opportunities and increasing coherence in policymaking.

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Figure 1 provides a visual summary of the integrated contributions of a strategic foresight toolbox for policymaking, emphasizing common elements and complementary roles, including participatory methods, understanding of system change, and the rich toolbox of approaches such as megatrends monitoring and analysis, serious games, and speculative design.

Figure 1. The strategic foresight toolbox to address systems change

Source: Own elaboration.

Foresight is a rich field with a large toolbox that provides ample space to tailor forward-looking approaches to a wide range of policymaking needs and to generate genuinely novel knowledge about the future. The deliberative processes used in most foresight approaches are at the heart of future knowledge generation and of knowledge integration in policy processes.

Making foresight instrumental to public managers

Foresight processes combine methods and mechanisms that facilitate conversations about the future in complex policy contexts, acting as a catalyst for the broad understanding of systemic change across multiple issue areas through co-creation (Matti et al., 2022). In this regard, and following a results-oriented logic, strategic foresight can be associated with I) supporting the development of a robust future-oriented understanding of system change; II) raising awareness, identifying, assessing and co-creating alternative systemic policy mixes and strategic areas of intervention, and III) contributing to formulating long-term visions to support decision-making, monitoring and evaluation activities. Relying on a multidisciplinary framework, foresight can be used to open dialogue and unlock opportunities in complex and interlinked sectors such as climate adaptation and regional development by creating a safe space in which potential interventions can be developed to address strategic issues through multi-level aspects of governance

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and guide long-term decisions and investments (Bianchi et al., 2024).

The use of strategic foresight in EU policymaking is growing but there are still significant barriers to its application. One major barrier is the strong political incentive to focus on immediate issues, leading to a "presentist bias" and a lack of attention to future consequences (Boston, 2021). Additionally, there is still a lack of foresight literacy in policymaking circles, with some decision-makers using "lack of time" as a pretext to avoid engaging in strategic foresight. This is compounded by the qualitative nature of strategic foresight, which is different from the normative and quantitative mindset often found in traditional policymaking. Another important barrier is the need for foresight

work to be commissioned by individuals who understand its benefits and resource requirements. Overcoming these barriers will be crucial for incorporating strategic foresight into policymaking.

Table 1 (see next page) shows examples of how four regions demonstrate both unique and shared approaches to strategic foresight by following a challenge and outcome-oriented approach. Each region tailors its policy challenges to specific needs: urban revitalisation in Hauts-de-France, innovation and climate goals in Helsinki-Uusimaa, comprehensive foresight in Ostbelgien, and climate adaptation in Sardinia. All regions emphasise a participatory approach, engaging diverse stakeholders such as local authorities, researchers, and citizens. This inclusive strategy fosters comprehensive policymaking. Co-creation for policy methods vary: workshops and youth engagement in Hauts-de-France, ecosystem building in Helsinki-Uusimaa, cross-sectoral cooperation in East Belgium, and predictive climate models in Sardinia.

Common themes in learning and success include the importance of inclusiveness and collaboration, flexibility, and public participation. Each region values continuous learning and the dissemination of good practices to achieve long-term goals, highlighting the shared belief in adaptability and inclusive governance despite diverse approaches and regional priorities.

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Table 1. Strategic application for sustainable development policy in four EU regions

	Hauts-de-France	Helsinki-Uusimaa Region	Ostbelgien	Sardinia
	An application to city centres	*A climate-neutral future region*	*Foresight supporting regional development*	*Sustainable development and climate adaptation*
The Policy Challenge	Revitalising town centres through engineering support and subsidies.	Regional Vision 2030 (innovation, environment, and happiness).	Strategic foresight covering all areas of competence in the Regional Strategy for 2040.	Addressing climate change impacts and sustainability goals within the broader Regional Strategy.
The Regional Perspective	Systemic understanding of future changes, integrated policies, and knowledge dissemination.	Climate neutrality, economic competitiveness, and high employment by 2030.	Interdisciplinary approach, comprehensive situation analysis, broad-based participation.	Anticipating future climate scenarios, experimenting with sustainability, and benchmarking indicators.
Participatory Approach	Local authorities, researchers, youth, non-profits, and town planning agencies.	Municipalities, public sector, universities, companies, citizens, politicians, networks, associations, and projects.	Administration, citizens, politics, communities, and stakeholders.	Regional departments, local authorities, citizens, R&D centres, schools, businesses, and the third sector.
Co-creation for Policy	Workshops for diagnosis, youth engagement, embedded foresight, wide communication tools.	Future-orientated strategy review workshops, ecosystem building, R&D and Green Deal research.	Cross-sectoral approach, SWOT analysis, common visioning, coherent government action.	Proactive governance, climate impact & scenarios, participatory process, integration with evaluation.
Reflexive Learning	Strategic vision, awareness among youth and elected officials, dissemination of good practices.	Collaborative results, openness to new methods, preparedness, learning from others.	Governance driving vision, public participation, sustainability, practical approach.	Participatory process, financial instruments for sustainability goals, monitoring, and context-driven objectives review.

Source: Own elaboration based on Matti et al. (2023b).

The four examples illustrate foresight practices that serve as a catalyst for co-creation and encourage collaboration and innovation while enabling collective learning. By inviting different stakeholders to participate in the process, foresight gives everyone the opportunity to contribute their unique perspectives and insights. This collaborative approach not only improves the quality of policy decisions, but also strengthens the anticipatory capacity of all stakeholders.

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Barriers and opportunities in applying foresight to policymaking

One of the biggest challenges in implementing foresight is overcoming the barriers to adoption. To achieve this, it is important to cultivate a culture of foresight across many organisations. This includes securing buy-in from top management, institutionalising foresight practises and investing in the training of decision-makers. In addition, promoting foresight through pilot projects and involving policy makers in the process can help build trust and familiarity.

At the heart of successful foresight initiatives is the principle of co-creation. By emphasising the systemic dimension and applying foresight to a wide range of issues, policymakers create new opportunities to harness the collective intelligence of their constituencies (Matti et al., 2022). When foresight is made accessible through on-demand contracts, organisations can use this valuable tool (FoD, 2023).

To ensure the effectiveness of foresight processes, three crucial elements must be in place: methodological expertise, recruitment skills and user involvement. Methodological expertise is essential for the selection of suitable tools, the design of interfaces, the customisation of the approach and the successful implementation of the process. Recruitment skills are crucial for identifying and involving the stakeholders with the relevant expertise. Finally, user engagement is crucial to ensure that policy makers are meaningfully involved in the process, take ownership of the results, and apply them in their work (Störmer et al., 2020, Hichert & Schultz, 2024).

Conclusions

The role of public policy is to build a desirable future by creating the conditions and opportunities for change (at national, regional, city and local levels). In today's overly complex circumstances and urgent need to transition towards sustainability, developing systemic approaches to understand and enable change at many levels has become vital. This is putting traditional methods of policymaking to the test.

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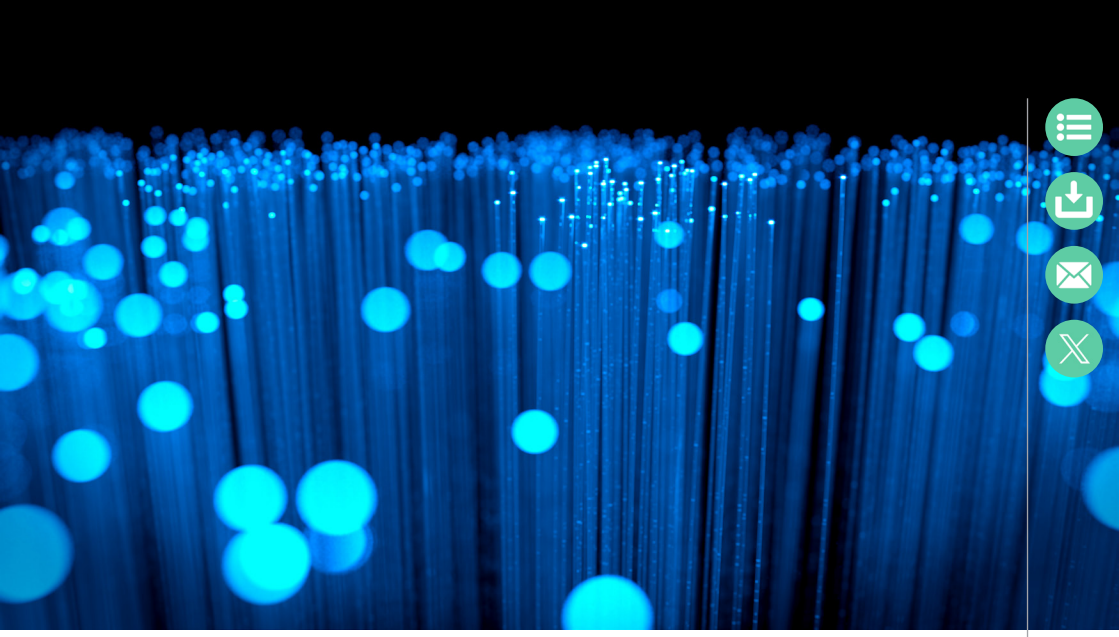
Strategic foresight offers a rich toolbox to make sense of complexity, understand the systemic nature of issues, explore alternative ways forward in order to weigh the pros and cons, and translate the selected pathways into coordinated policy actions (e.g. investments, regulations,



strategies) around sets of strategic areas covering multiple domains.

In the hands of skilled professionals, the rich strategic foresight toolbox offers endless possibilities to address the needs of policymakers regarding any issue. This ranges from short and simple entry-level foresight interventions lasting a few hours to complex and comprehensive processes taking place over many months and involving tens or hundreds of participants, depending on time and resources available. The outcomes from such processes range from quick systemic checks to in-depth analyses of alternative ways forward and long-term visions.

However, getting the best from strategic foresight for policymaking calls for finding space next to the strong incentives to focus on immediate issues, for building foresight literacy further, and for educating experts and policymakers to the

strength of qualitative information from collective intelligence as evidence for policymaking.

By embracing strategic foresight as a collaborative and inclusive approach, policymakers can better engage with the complexities of the future. Through co-creation, foresight empowers individuals to contribute to shaping the policies that will guide their communities. In doing so, it strengthens the forward-looking capacity of all actors and fosters a more resilient and adaptable governance landscape. ▮

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Why foresight?

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Abstract

This essay proposes a structured reflection on why it is good to use foresight. It starts by defining the concept and establishing why it provides a better approach to tackle issues by framing them as future challenges. Furthermore, foresight allows us to adopt a normative focus to conceive and deploy our preferred future options. In short, the real question is not why it is useful to apply foresight, but rather why we are not all using it.

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Preliminary considerations

First, I must start by admitting that I always feel uncomfortable when answering this question. As it is expressed, it implies that the normal thing is not to engage in foresight. Even more, that doing it is somehow exceptional and that, precisely for this reason, it is necessary to justify it. For me, what should be asked (to those that don't use it) is the opposite, "How come you don't use foresight?".

Second, the title is a homage to the influential book by Eleonora Masini *Why Futures Studies?*, and to avoid any suspicion of plagiarism I have opted for a more contemporaneous label, *foresight*, although they are clearly interchangeable. However, it must be noted that in the continental ambit, particularly in those countries with Latin languages, we go by *prospective*. Thus, in my country I am a *prospectivist*, while in the Anglo context I am a *futurist*. Here, I will use mostly *foresight* with an occasional *futures*, as the short version of futures studies.

Now that these two questions have been dealt with, I can focus on explaining what foresight is, what we can use it for, and, more important, why it is worth using it.

What is foresight?

Foresight is the discipline that studies the future in order to understand it so we can influence it

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It is worth breaking down the main elements of this definition to gain more insight:

First, foresight is a discipline. Which is akin to saying that this is not hermetic knowledge. Futures studies functions according to the same principles that rule any other social science. And, like them, it can also be studied and learned.

Second, the specificity of foresight is that its field of action is the future. Notice that I didn't say object. The future cannot be the object of any discipline for the simple reason that it does not exist. And to make

things more complicated it cannot come to be, because as it is about to happen, it becomes the present (that does not exist either). But the point is that in foresight we study phenomena that will happen in the future, but not the future *per se*. And even though the future does not exist, this does not mean that there are not lots of information and inputs that we can use to analyse what may occur.

Third, and the most important part of the definition, the purpose of futures is to understand what may happen. This indicates that foresight is not about predicting the future. As matter of fact, in foresight we do not believe that the future can be predicted. But we can understand what the causes are that trigger an occurrence and how it may consequently unfold. In other words, of all the things we can learn in futures, the least important one is precisely what may happen; we are, however, very interested in how and why it may come to be. Bertrand de Jouvenel, one of the founding fathers of futures studies, explained it very well in his book *The Art of Conjecture*. In that work he presented the following paradox: if the future is predetermined, then there is nothing that prevents us from knowing it; but if we find out what will happen, what prevents us from changing it? The answer is nothing.

Foresight is not about predicting the future. As matter of fact, in foresight we do not believe that the future can be predicted

Fourth, and finally, the focus on understanding is critical as it is what gives us traction with regards to the future. In the continental foresight tradition, the final goal in any future-oriented research has always been to gain some capacity to

shape or to influence whatever can occur. After all, if we see a potential danger, it would be absurd not to try to avoid it; likewise, if we detect an opportunity, we will try to make the most of it. Yet only if we have an accurate idea of why something may happen and how it will develop, will we have a real chance to do something about it.

At this point, we can move on to answering the starting questions, and the first response has to do with the fact that...

The present has no solution

Or, to put it accurately, current problems do not have solutions in the present. Any situation that is perceived today as a difficulty is the consequence of yesterday's choices or decisions. And the bigger and more serious this obstacle is, the further into the past we will have to go to find its causes; and the more complex it will be to deal with it in the present. Therefore, the first step when managing a big problem is to acknowledge that we are already late; the best moment to solve it has passed already and now we need to employ a different strategy.

Current problems do not have solutions in the present. Any situation that is perceived today as a difficulty is the consequence of yesterday's choices or decisions

The second step is to understand that any trouble that we are facing is a living phenomenon, that it is evolving and, most likely, growing. Focusing on the contemporaneous reality of an obstacle will do us no good. In the time we will require to try to solve it, it will keep on changing and, eventually, whatever resolution we can come up with will surely

fall short. The issue would have moved to a new stage, and we will be lucky if our solution does not backfire us.

Instead what we must do is to anticipate the problem's future behaviour. We should develop several alternative scenarios to explore diverse developments. And subsequently, consider different countermeasures. This is something that foresight does very well. Let's remember that futures studies seeks to understand, to generate knowledge, about the future so we can choose or design the best course of action. If we manage to comprehend what the issue's evolutionary dynamic is, we will be better equipped to anticipate its development and, thus, what the best way is to tackle it.

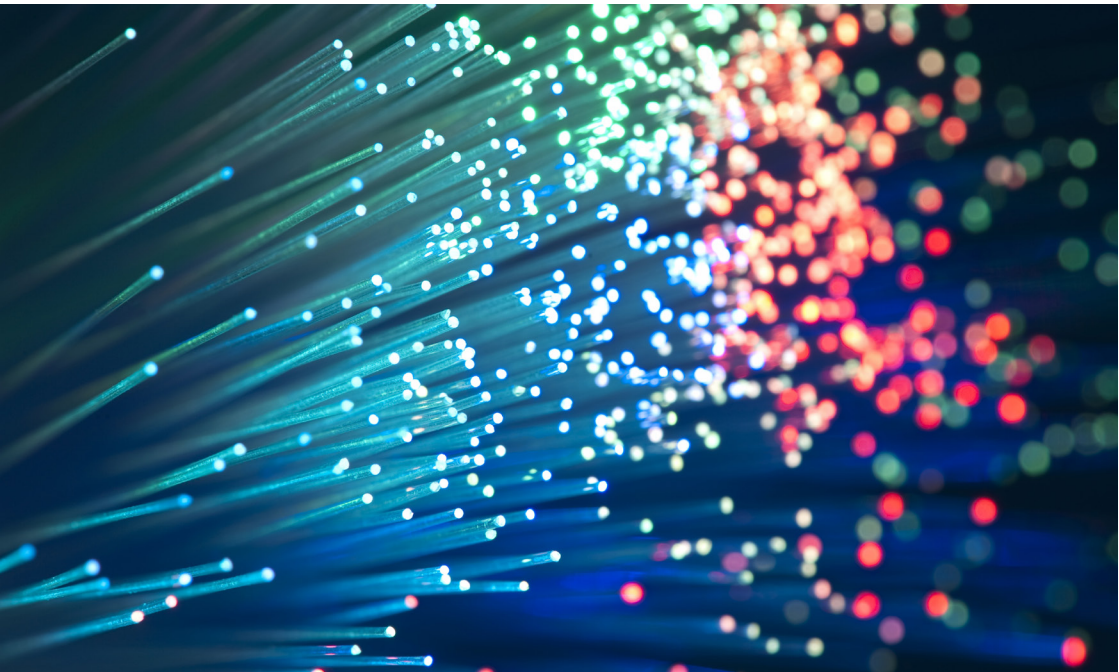
So, once we have established that it is not advisable to focus solely on the problems of the present, it follows that we should be.

Addressing the challenges of the future

It is very common to consider that a challenge is just another name for trouble, but this is not true. A challenge is, first, an issue that questions us, that calls us into action. It will be our response that will determine whether the challenge becomes a problem or, on the contrary, whether we can transform it into an opportunity. Obviously, if we are talking about something that is already a problem, thinking that we can just transform it into an opportunity is perhaps excessively optimistic. But experience shows us that there is no issue, no matter how bad, that cannot get worse. Thus, if nothing else, we should try to avoid it being exacerbated.

It will be our response that will determine whether the challenge becomes a problem or, on the contrary, whether we can transform it into an opportunity

That is why the correct attitude in the face of any difficulty is not to focus on



the present problem but to characterize it as a future challenge. Understand how it can evolve, detect which elements can affect its development and, above all, understand the time frame in which it is happening. One of humanity's biggest problems is that we instinctively tend to steer clear of change because it distresses us. This means that we often misjudge the speed and extent of change. Again, foresight can help us here. Not only can it give us the keys to comprehend the evolutionary logic at play but it can also give us an accurate temporal perspective of when we need to act or, even, the time we have left. Yet, and this is fundamental, only by anticipating may we gain time to apply any workable solution. Otherwise, we will only be able to react to whatever may have happened and we will be condemned to always be one step behind events.

These responses are still reactive. Deep down they are the consequence of a lack of foresight in the past. But foresight can also offer something better:

Taking better decisions in the present

The main requirement for making a sound decision is to know what the consequences of each different alternative we might choose are. However, we often rush into decisions without having worked out the potential outcomes of each choice. As a result, it is quite common for us to end up with undesired results.

Once more, foresight can be extremely helpful here. If we think of the future as an uncharted territory, foresight would be like mapping it. Every time we manage to uncover what may be the future development of trends and events, we add information to this future map, and we gain knowledge about it. But it is also true that sometimes having the map is not enough to set the best course of action. This is why foresight is often combined with strategy. While foresight helps us to know more about what we may find ahead, strategy helps us to determine the course (or option) which is best for us. So, if foresight is akin to mapping a territory, strategy is like developing a navigator. A navigator that is fine-tuned to our specific circumstances and which can, therefore, provide us with the best route (or decision).

However, the most important part of this is that, by combining foresight and strategy, we obtain a powerful tool for deciding what is the most desirable future for us and how we can plan for it. Essentially, this combination helps us to leave behind the reactive mode and move onto a full normative approach.

By combining foresight and strategy, we obtain a powerful tool for deciding what is the most desirable future for us and how we can plan for it

Conclusion

All this adds up to a very simple answer. We engage in foresight to gain agency over our own future. If we don't use it, we get caught in the inertia of past and present events and our choices drop dramatically. Not only that, but we will also get trapped in a mindset driven by problems that we will not be able to solve and, ultimately, this will vastly reduce our future options.

By using foresight we widen our future possibilities, and we get used to thinking about future occurrences as diverse alternatives. Thus, even if something unforeseen happens, we will be better equipped to deal with it, as we will have acquired the discipline to always consider diverse courses of contingency action.

So I can only end by posing my own question. If you haven't yet started using foresight, what are you waiting for? ▮

Protecting the interests of future generations – lessons from Wales

Sophie Howe
Intergenerational Fairness Adviser, first Future Generations Commissioner for Wales

Abstract

*In 2015, the Welsh Parliament (known as the Senedd) enacted the **Well-being of Future Generations (Wales) Act** (WFGA), with pioneering sustainable development principles aimed at fulfilling present needs without jeopardising the potential of future generations. This landmark legislation established the world's first statutory Future Generations Commissioner, tasked with safeguarding the interests of Wales' future. Together, these components represent a comprehensive approach to embedding long-term thinking and intergenerational fairness into policymaking, and shifting focus from economic growth to prioritising the well-being of people and the planet. This paper explores the Act's origins, successes and challenges from my perspective as the first **Future Generations Commissioner for Wales** and offers insights for other countries.*

How it all started

Sustainable development has a deep-rooted history in Wales. Since the Welsh Parliament's formation in 1999, sustainable development was declared a central organising principle of government. Despite the emergence of progressive policies, such as effective waste reduction strategies that led to Wales achieving the second-best global recycling rate, government decisions did not consistently align with this principle.

Nevertheless, the system in Wales was and continues to be characterised by some key components which facilitate progressive innovative and more inclusive policy, namely:

- a robust voluntary or third sector, emphasising equality with public and private sectors;
- the establishment of a new Assembly (later, the Senedd) in 1999, which sought to prove its worth and demonstrate the potential of devolution;
- a stable political environment predominantly occupied by centre-left parties;
- a strong sense of community, with accessible politicians;

Sophie Howe during the session "The future of education", ChangeNOW summit in Paris 2022.

- an inclination toward external independent scrutiny, especially through independent commissioners.

These elements contributed to the creation of the Well-being of Future Generations Act, initially born out of civil society frustration and a leading politician's call for more specific sustainable development requirements. Political momentum grew after the election of a new centre-right government in Westminster in 2010, which dismantled the UK Sustainable Development Commission, prompting Wales to take a distinct path and commit to legislating for sustainable development.

A national conversation that developed a vision for Wales

Although the actual commitment remained very open – one line in an election manifesto that simply said, "We will legislate for sustainable development" – the ongoing involvement of civil society enabled an open conversation with the people of Wales to determine their vision of a sustainable Wales. The national conversation (**"The Wales We Want"**) was supported and funded by the Welsh Government but convened by the voluntary sector organisation Cynnal Cymru under the leadership of Sustainable Development Commissioner Peter Davies. Engaging thousands of people across Wales – from school children to farmers, businesses and the Women's Institute, each group or community fed in their own views on the future of Wales and what they wanted to leave behind for their children, grandchildren and future generations.

Their views were analysed alongside the UN Sustainable Development Goals and both were reflected in seven long-term well-being goals that reflect a vision for Wales which the government and public sector institutions must work towards. The Welsh Government sought to create a framework that would not only address environmental issues but also integrate social, economic and cultural dimensions of well-being. This inclusive approach ensured that the Act reflected the aspirations and concerns of diverse communities across Wales and also spanned the political divide.

Each group or community fed in their own views on the future of Wales and what they wanted to leave behind for their children, grandchildren and future generations

Key provisions of the Act

The WFGA outlines seven well-being goals that public bodies must strive to achieve:

1. A prosperous Wales
2. A resilient Wales
3. A healthier Wales
4. A more equal Wales
5. A Wales of cohesive communities
6. A Wales of vibrant culture and thriving Welsh language
7. A globally responsible Wales

Each goal has a statutory definition aimed at fostering conditions under which both people and the planet can thrive. Public bodies are required to maximise their contributions to all goals, recognising the interconnectedness of public services. For example, the National Health Service (NHS) cannot achieve a healthier Wales alone, as many health determinants lie outside healthcare. Likewise, the NHS has significant spending potential and can influence job creation, working conditions and carbon emissions in the way they procure goods and services as well as in their own operations.

To achieve these goals, the Act introduces the Five Ways of Working: prevention, collaboration, involvement, integration, and long-term thinking, promoting a holistic approach to sustainable decision-making.

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Accountability

To measure success in achieving the goals and track overall progress, **50 national indicators** were set. Establishing metrics to evaluate the success of the Act has posed a considerable challenge. The complexity of well-being and sustainability makes progress difficult to quantify, given the existence of so many co-dependencies and uncertainties and the expansion of time horizons, as recognised in the Act itself.

Indicators are a necessary part of the system but are not the change we need to see in and of themselves. In my opinion, this is where many countries go wrong, by adopting a performative rather than a transformative approach, and measuring

outcomes but not actually framing their decision-making to achieve those outcomes. The Welsh approach, on the other hand, permeates all aspects of the system, from budgeting decisions to asset management and procurement.

The Future Generations Commissioner

The Act also establishes a Future Generations Commissioner, initially proposed by the Government to advise and support public bodies on how they should go about implementing the Act and achieving the well-being goals. However, as the Act progressed through the Parliament, new provisions were added to give the Commissioner "more teeth", including duties to monitor and report on the progress being made by public bodies, and powers to conduct statutory reviews of public bodies actions and require those bodies to publicly respond to the Commissioner's recommendations.

As set out in the Act, the Commissioner's role is to act as "guardian of the interests of the future generations of Wales". As the first Commissioner, I had the privilege of setting the tone and focus. I viewed the mission, not just as a journey, but as an expedition of cultural change involving multiple risks and challenges:

- there was a risk that public bodies would adopt a performative rather than transformative approach, i.e., focus on the bureaucratic requirements of the Act by writing plans and producing reports rather than taking decisions using the

As the first Commissioner, I had the privilege of setting the tone and focus. I viewed the mission, not just as a journey, but as an expedition of cultural change involving multiple risks and challenges

Five Ways of Working set out in the Act and testing their impact against the goals;

- because the challenges of the whole system needed to shift in order to allow this cultural change to happen, we needed to create new ways to measure performance, share budgets and take people with us;
- new leadership skills and competencies needed to be built whilst phasing out the old ways of doing things.

My focus as the first Commissioner, therefore, was to avoid the Act becoming a purely bureaucratic exercise by inspiring change and challenging the public sector to think and act differently. One of the most significant as well as challenging aspects of the Act and the role of the Commissioner is that the goals are so broad that they cover almost all aspects of policy and involve the bodies responsible for public service delivery. The Commissioner has a unique "helicopter view" of what is happening across Wales that includes where connections should be made, the time horizons being used for planning, and the ability to connect innovators and good practice with those who need help.

Supported by my office of around 25 staff, I spent my time demonstrating what change looked like: finding the champions in the system, highlighting the big or small changes they were making, and showing what simple changes and more ambitious changes could look like. Early on, I published 80 very practical **simple changes** that public bodies could make on

I spent my time demonstrating what change looked like: finding the champions in the system, highlighting the big or small changes they were making, and showing what simple changes and more ambitious changes could look like

their journey to meeting the goals. One of these was to stop cutting the grass to allow biodiversity to thrive. This has been widely adopted with Cardiff Council, for example, now managing land equivalent to 272 football pitches for **biodiversity**. Other changes included the following:

- developing learning and understanding of long-term thinking tools and techniques;
- convening different actors and sectors on topics to help them make connections that hadn't been realised before;
- challenging decisions that had not properly applied the requirements of the Act.

The first big test of this last point involved Government proposals to spend its entire borrowing capacity on building a new stretch of motorway to deal with congestion. I intervened and challenged

the Government on how they had applied the Act. This led to a long and complex story, the short version of which is that the Government changed its mind and spent the money instead on new public transport infrastructure which provides a better return across multiple well-being goals.

What has changed

Whilst it will clearly take time to complete the transformation envisaged by the Act, some significant progress is being made.

Awareness and engagement: The Act has significantly raised awareness about sustainability and the importance of considering future generations in policymaking. Public bodies have begun to engage more actively with communities, fostering a sense of shared responsibility for long-term well-being. Although there is still a way to go, my parting report as I came to the end of my term as Commissioner concluded that delivering well-being was now part of the DNA of the Welsh public sector.

Policy innovation: The Act has transformed transport policy, with a major shift away from road building towards investment in public transport. It has guided the development of the new **school curriculum**, which now prioritises the skills that will be needed in the future as well as focusing on health and well-being, and developing ethical and informed citizens. It has generated a new strategy to build on the significant achievements in recycling towards becoming a zero waste nation. Social prescribing is increasingly being implemented across public and

Although there is still a way to go, my parting report as I came to the end of my term as Commissioner concluded that delivering well-being was now part of the DNA of the Welsh public sector

voluntary sector partnerships. Even the **Football Association of Wales** is helping to deliver this across all of the well-being goals, while the **Government's Economic Action Plan** is focused around delivering a well-being economy.

Innovative practices: The implementation of the WFGA has encouraged innovative practices within public bodies. Many organisations have developed new strategies for collaboration and engagement, leveraging technology and community resources to enhance their well-being objectives.

Policy integration: The Act has facilitated the integration of well-being goals into broader policy frameworks, encouraging alignment between various sectors and departments. The Arts Council, for example, is working to develop social prescribing, leveraging the power of **arts and culture** to promote health and well-being, and their new **strategy** focuses on utilising the arts to communicate about climate change. We are seeing

examples of this holistic approach across organisations and sectors lead to more cohesive and coordinated responses to complex societal challenges.

Going global

Wales has gained international recognition for its pioneering efforts in sustainable development through the WFGA. The Act serves as a model for other jurisdictions seeking to embed sustainability and intergenerational equity into their governance frameworks. We are seeing many other countries learn from the example set by Wales: from Kenya, which has established a Senate Caucus for Future Generations, to Australia, where the Federal Chancellor has launched the first well-being framework, and the European Union (EU), where Commission President Ursula Von De Leyen has committed to appointing an **EU Commissioner for Intergenerational Fairness**. Citizen-led and political movements are building in Spain, Portugal and Mexico, and new foresight units have been established in the United States.

This year the United Nations will pass a **Future Generations Declaration** heavily influenced by the work we have done in Wales. This will be a significant step in mainstreaming the future generations agenda, but will only become transformational if each nation commits to building their approach with citizens, reforming the architecture of their whole system, and political leaders commit to working beyond electoral cycles: taking action today for a better tomorrow. ▮

The Act serves as a model for other jurisdictions seeking to embed sustainability and intergenerational equity into their governance frameworks

Adaptive governance: new technological infrastructures to address complex societal challenges

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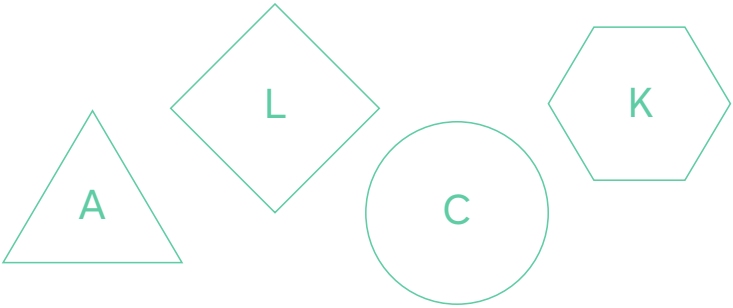
Director of Agirre Lehendakaria Center (Basque Country)

Abstract

This paper explores the concept of adaptive governance as a critical approach to addressing complex societal challenges. These multifaceted issues, often termed "wicked problems", require experimental and collaborative solutions beyond the capacity of traditional governance systems. The paper identifies core capabilities of adaptive governance such as ecosystem visualisation, real-time listening to social perceptions, collective deliberation, and co-creation through experimentation portfolios. Additionally, it highlights the transformative potential of high-performance computing and artificial intelligence (AI) in managing complex societal data and enhancing anticipatory governance.



Introduction

Socio-ecological transitions, redesigning care models and integrating artificial intelligence (AI) into our daily lives are some of the most pressing priorities for global society. These are multifaceted challenges for which no single solution, nor any one actor, can provide comprehensive answers. Because of this complexity, they are categorised as "wicked problems" (Crompton, 2010), requiring an experimental and collective intelligence approach (Mazzucato, 2014).

Addressing such complex challenges demands holistic approaches that prioritise planetary sustainability and human well-being across generations. However, current governance systems lack the tools needed to respond proactively and navigate these challenges in collaboration with other key stakeholders. The need for adaptability is paramount (OECD, 2021),[1] as these issues are laden with uncertainty and require flexible handling to deal with unforeseen changes. Rigid, predefined solutions are ineffective, and governance structures must evolve rapidly (Wiser & Aganaga, 2023).

The need for adaptability is paramount. Rigid, predefined solutions are ineffective, and governance structures must evolve rapidly

1 Read more about **adaptive innovation in the public sector** in the OECD's 2021 report.

As Janssen and van der Voort (2016) note, adaptive governance is suited to tackling complex, uncertain problems that involve numerous stakeholders. Recognising that technological and social systems are intertwined and inherently unpredictable, adaptive governance prioritises learning as a core value (Hasselman, 2016). The shift from stability and accountability to continuous learning is essential for navigating the complexity, uncertainty and divergent interests involved in these wicked problems.

Achieving large-scale and long-term impact requires, not just changes in behaviour from key actors, but also structural transformations in the way institutions function and work processes are organised

Systemic transformation is only possible when complementary innovations emerge in interconnected ways, each depending on the other (Espiau, 2022). Achieving large-scale and long-term impact requires, not just changes in behaviour from key actors, but also structural transformations in the way institutions function and work processes are organised. This transformation entails a cultural shift that acknowledges and incorporates the social dimensions of innovation processes (Ibarretxe, 2014).

Core capabilities of adaptive governance systems

Based on the experience generated by the Agirre Lehendakaria Center for Social Political Studies (University of the Basque Country) in designing, implementing and evaluating social innovation platforms to address complex challenges, the following core capabilities are needed for the implementation of new adaptive governance systems (see figure 1 on page 28).

1 Ecosystem mapping

The mapping and visualisation of all the stakeholders interacting in relation to a specific complex challenge is the first step in the design of an adaptive governance system. A lack of real-time information will lead to the duplication of efforts and disconnection of key actors and initiatives. By reinforcing key collaboration opportunities and addressing ecosystem gaps, this visualisation enables better understanding of the interaction between actors and initiatives (Matti et al., 2020);[2] reveals leverage points, weak connections and their evolution over time: and guides strategic decisions. Due to the amount of data that needs to be visualised, new digital mapping tools need to be implemented.

2 Deep listening and sensemaking

It is difficult for governments, institutions and civil society organisations to deeply understand existing social perceptions of the most complex issues, such as climate change, migration or aging. In the words of Patterson et al. (2011), "in order to support long-term structural shifts, policies may have to interact with many transformative changes as they unfold rather than being defined and fixed at some initial date". More importantly, there is almost no capacity to predict rapid shifts in perception in order to incorporate adaptive governance strategies to cope with the exponential growth of these crises. A lack of real-time information on

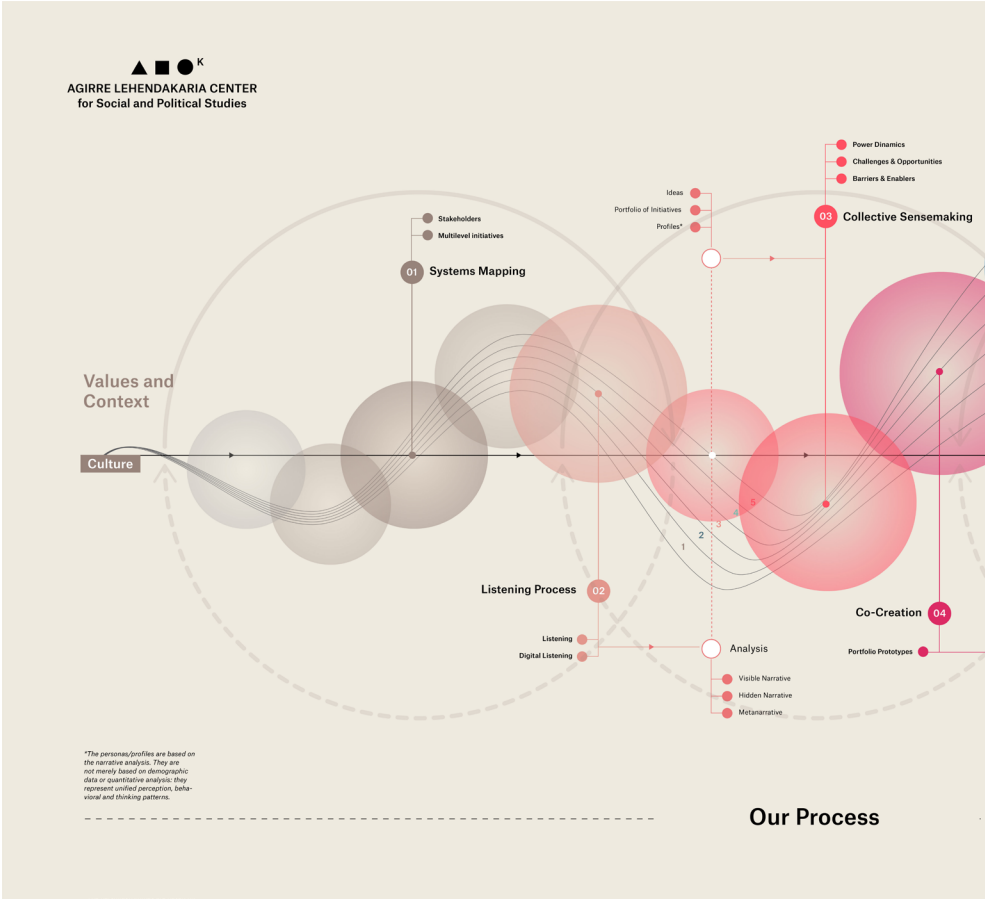
2 See the handbook *Challenge-led system mapping: A knowledge management approach*.

A lack of real-time information on people's perceptions of certain issues can condition the impact of excellent policies designed by rationalistic analysis alone

people's perceptions of certain issues can condition the impact of excellent policies designed by rationalistic analysis alone.

Faced with this challenge, new adaptive governance systems need to develop complementary capabilities to capture, analyse and segment the variety of often contradictory narratives on these topics, in order to propose alternative but connected solutions adapted to different ways of understanding reality.

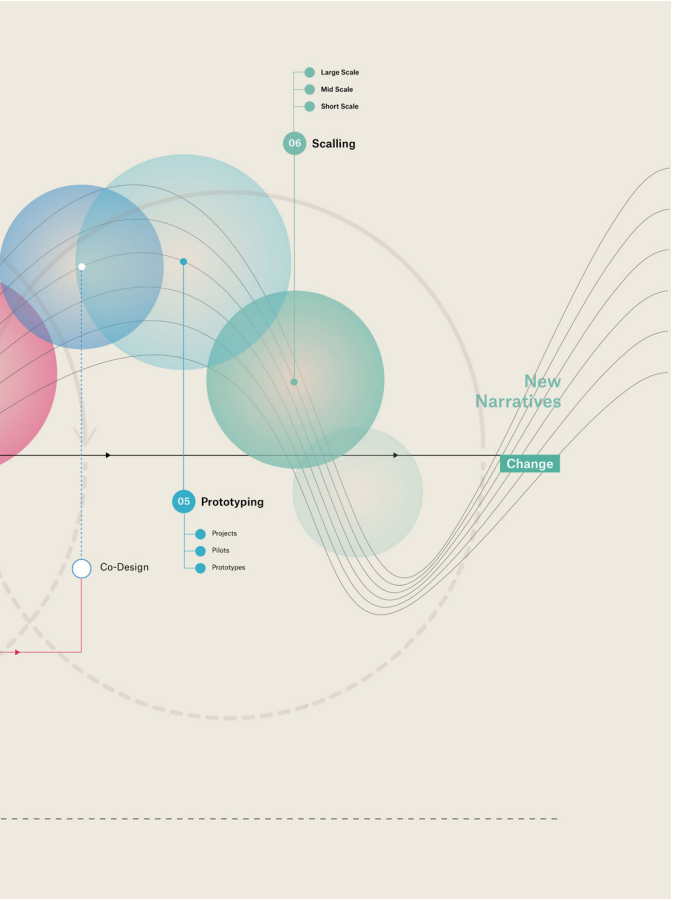
Figure 1. Core capabilities of adaptive governance systems



Source: Agirre Lehendakaria Center.

Given that these narratives condition the effectiveness of our actions, identifying them through deeper listening processes and collective deliberation is essential to segment and visualise whether or not our actions are responding to the diversity of the territory (Espiau, 2022).

Investing more time and resources in listening adequately to these dynamics in a sustained way will not only allow new adaptive governance systems to truly incorporate the cultural dimension of each



context into the social innovation process (sensemaking), but also inform our portfolio of actions in a way that responds directly to them.

3 Co-creation and portfolio experimentation

Instead of each key stake holder acting separately, interventions should be co-created. Each agent incorporates specific knowledge, and the sum of their respective knowledge produces collective intelligence (Baltzersen, 2022). The set of interconnected activities generated through the co-creation process can be interpreted as an innovation portfolio (OECD, 2021). These strategic governance tools are created with the aim of reducing the risk of an organisation's or company's investment stakes by diversifying its activities. Instead of betting all its resources – human,

Instead of each key stake holder acting separately, interventions should be co-created. Each agent incorporates specific knowledge, and the sum of them produces collective intelligence

equipment and financial – on a specific solution, the risk is spread across several options and investments are subsequently consolidated in those positions that have delivered the best results.

By working in this way, an organisation is more likely to design the best option and make the correct innovation bets according to the results achieved, with the facility to adapt to constantly changing environments. The management of this portfolio allows the organisation to give a strategic orientation to its social innovation projects in a way that is interconnected with the rest of its ordinary activities (Gatti & Belle, 2022).[3] Applied to social innovation and adaptive governance, this approach allows us to build safe spaces for experimentation – and even to fail, because we will subsequently assess the impact of all the initiatives as a whole, not each one separately.

The fundamental objective is to analyse, in real time, interconnected data on actors, actions and perceptions related to a given complex challenge (Brugnach et al., 2008). The cross-referencing of information could allow a public authority to make decisions based on the available scientific evidence and manage a system of experimentation through digital simulations before implementing new action in real-life scenarios. In addition to reducing the risk of the process, a new governance system of this type could allow public institutions to adopt

The cross-referencing of information could allow a public authority to make decisions based on the available scientific evidence and manage a system of experimentation through digital simulations before implementing new action in real-life scenarios

3 A presentation of such a portfolio can be found **here**.

a new role involving the integration and systematisation of social innovation processes.

A new digital infrastructure to address complex societal challenges

Given the sheer volume of data and the number of actors involved in collaborative innovation, a robust digital infrastructure will be essential. High-performance computing and AI merge technical-scientific solutions with social perceptions, offering insights into how communities might adopt solutions. For example, the Barcelona Supercomputing Center's project to simulate Earth with Marenostrum 5 allows us to anticipate future scenarios with unprecedented

precision. The concept of *digital twins*, already applied in fields like urban mobility and medicine, can be extended to social simulations (Caldarelli et al., 2022).

Technology's application to complex societal challenges offers huge transformative potential. Supercomputing enables the monitoring of social, economic and health data in real time, helping us to predict trends and simulate possible future scenarios (social simulation). Such computational tools can be harnessed for anticipatory governance, providing governments with a powerful new toolset to make informed policy decisions (Crosas, 2024).

Technology already allows highly sophisticated operation in the analysis of qualitative and quantitative data, but its use is limited to the natural and exact sciences (mathematics, medicine, biology, geophysics, mechanics or medicine). New adaptive governance systems could apply computational science to complex societal challenges. Through these models, we visualise the potential impacts of different policy investments and citizen responses, providing policymakers with a clearer picture of possible outcomes. This in turn facilitates better-informed decisions and more adaptable governance systems.

To improve adaptive governance systems, technology will need to enable the identification, analysis and segmentation of large volumes of real-time data on social perceptions, allowing future behaviour in various scenarios to be predicted. With increasing amounts

The concept of *digital twins*, already applied in fields like urban mobility and medicine, can be extended to social simulations

of social, economic and health data, computational methods such as complex systems models could transform our understanding of societal challenges.

Beyond climate models, these computational tools can simulate social scenarios, enabling more controlled innovation and experimentation. Caldarelli et al. argue for moving beyond digital twins to create public "cyber" spaces, where citizens can engage in participatory governance, proposing changes and exploring scenarios alongside local authorities. This interactive approach would help policymakers to make better-informed decisions, supported by computational models that visualise the impact of different policy choices and responses.

Computational tools can simulate social scenarios, enabling more controlled innovation and experimentation, helping policymakers to make better-informed decisions

Computational models also allow us to work with hypotheses, scenarios and visualise different variables and combinations of a given issue – showing the impact of one or another public policy investment or the potential responses of different perceptive profiles to a given measure – and could become essential tools in political decision-making. The key is to be able to combine in real time virtual simulation with physical experimentation processes in protected environments. ▮

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The future of work and technology 2050 – scenarios and actions

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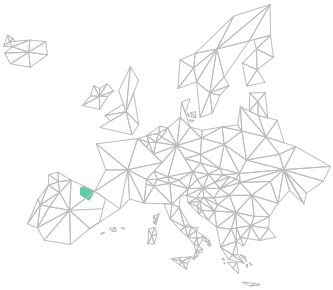


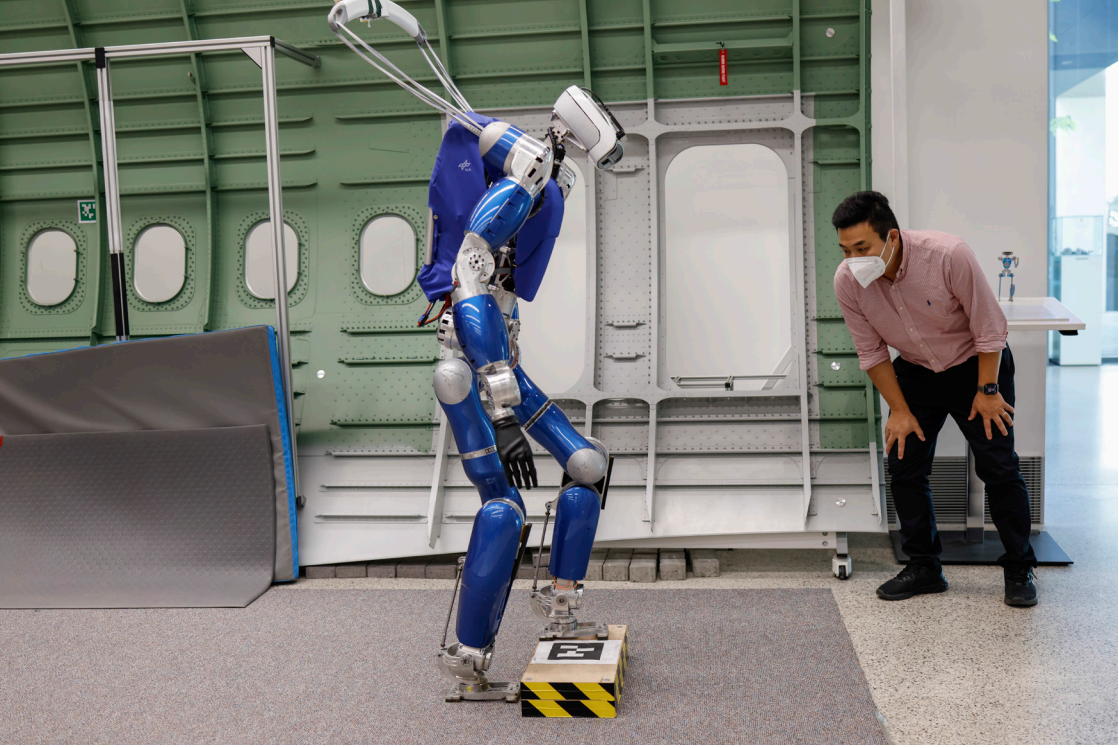
Abstract

*The future of work and increasing income gaps are among the most discussed topics with regards to long-term prospects at the moment. However, systemic perspectives and global as well as local strategies to improve the long-term outlook are often lacking. The **Millennium Project** has created three alternative **Future Work/Technology 2050 Global Scenarios** as input to national workshops to explore potential strategies to address the issues raised in these scenarios. These actions were assessed by five international surveys (government and governance, business and labor, education and learning, arts and media, and the science and technology communities) as to their feasibility.*

Foreseeable future technologies will not only alter work, they will alter the foundation of cultures worldwide. The world is aware that wealth concentration is increasing, income gaps are widening, jobless economic growth seems the new norm, return on investment in capital and technology is usually better than on labor, future technologies can replace much human physical and mental labor, and long-term structural unemployment is a "business-as-usual" surprise-free forecast. But the world does not have long-range strategies to address these issues, other than focusing education on science, technology, engineering, and mathematics. Improving STEM education is good, but insufficient to address global unemployment due to artificial intelligence, robotics, 3D/4D printing, synthetic biology, drones, nanotechnology, computational science, blockchain, cloud analytics, cognitive science, augmented human intelligence, quantum computing, conscious-technology, and future synergies among these.

The Millennium Project conducted a multiyear, international, multidisciplinary, and trans-institutional study involving panels of experts from around the world to assess concerns and identify actions that could help long-range thinking and strategies to address the work/technology

Improving STEM education is good, but insufficient to address global unemployment due to artificial intelligence or robotics



interplay of 2050. The inputs collected over the first phases were used to develop three Work/Technology 2050 Global Scenarios:

Scenario 1: It's Complicated – A Mixed Bag. A business-as-usual trend projection with change accelerating increasingly and decision-making characterized by both intelligence and stupidity. Irregular adoption of advanced technology; high unemployment where governments did not create long-range strategies, and mixed success on the use of universal basic income. Giant corporations' powers will have often grown beyond government control, in this government-corporate, virtual-3D, multipolar world of 2050.

Scenario 2: Political/Economic Turmoil – Future Despair.
Governments did not anticipate the impacts of artificial general intelligence and had no strategies in place as unemployment exploded in the 2030s leaving the world of 2050 in political turmoil. Social polarization and political gridlock in many forms have grown. Global order has deteriorated into a combination of nation-states, mega-corporations, local militias, terrorism, and organized crime.

Scenario 3: If Humans Were Free – the Self-Actualization Economy.
Governments did anticipate the impacts of artificial general intelligence, conducted extensive research on how to phase in universal basic income systems, and promoted self-employment. Artists, media moguls, and entertainers helped to foster cultural change from an employment culture to a self-actualization economy.

The detailed scenarios were given as inputs to national planning workshops organized by The Millennium Project Node Chairs around the world. Some workshops are still in planning at the time of this publication. The purpose of the workshops is to recommend strategies to address the issues raised in the scenarios. Thus far, some 30 workshops have been held in about 20 countries and discussions are being held to organize workshops in an

additional 20 countries. The outcomes of the workshops were distilled for further assessment by global panels of experts.

Nearly 100 actions were identified and grouped into five categories. They represent a menu of options for different actors around the world who can choose those which are most relevant to their situation. International expert panel ratings and commentaries on each action were distilled in the last phase of the research. Below is a list of the five actions rated most effective for each category:

Government and governance

- Establish a national independent (as much as possible) technology forecasting and assessment agency to inform legislative, judicial, and executive functions of government about future technologies and their impacts (a government Agency for the Future).
- The government, employers, and labor unions should cooperate to create lifelong learning models including forecasts of future skills requirements.
- Study how to prevent future conflict between technologically augmented humans (via AI, genetics, electronics or other means) and non-augmented citizens.
- Training programs for politicians before governing, including prototype governance methodologies.
- By 2050, introduce a global system for resource sharing (of all kinds: scientific knowledge, technology, labor).

The government, employers, and labor unions should cooperate to create lifelong learning models including forecasts of future skills requirements

Business and labor

- Develop ways for companies and employees to create ethical, aesthetic, and social value in addition to economic and material value.
- Establish labor/business/government databases for next technologies (NTs), future job skills, and retraining.
- Define a new social contract of workers' rights in a transactional and global economy.
- Create observatory or horizon scanning online platforms that update employment and technology trends along with discussions of the future of employment.
- Manage companies like professional networks, rather than as static hierarchies.

We should manage companies like professional networks, rather than as static hierarchies

Science and technology

- Directors of national science labs and other leaders in the science and technology (S&T) community should devote more effort to making current science and future technology understandable to the general public.
- Create national policies and standards for the Internet of Things (IoT) that stress future cyber security systems.
- Forecast synergies among the full range of NTs and their potential impacts (e.g. artificial intelligence, robotics, synthetic biology, nanotechnology, quantum computing, 3D/4D printing, IoT, drones (and other autonomous vehicles), VR and AR, cloud analytics, conscious-technology, semantic web, holographic communications, blockchain, and tele-presence).

- National S&T leaders should be part of the national team that creates, regularly updates, and implements their country's national S&T strategy.
- S&T and legal communities should collaborate nationally and internationally to establish legal frameworks and treaties that anticipate future liability requirements which can deter technological hazards and encourage technology befitting humanity.

S&T and legal communities should collaborate nationally and internationally to establish legal frameworks and treaties that anticipate future liability requirements

Education and learning

- Increase focus on developing creativity, critical thinking, human relations, philosophy, entrepreneurship (individual and teams), art, self-employment, social harmony, ethics, and values, to know oneself in order to build and lead a meaningful working life with self-assessment of progress towards one's own goals and objectives (as Finland is implementing).
- Include futures studies as we include history in the curriculum. Teach alternative visions of the future, foresight, and the ability to assess potential futures.
- Make tele-education free everywhere; ubiquitous, life-long learning systems.
- Shift education/learning systems more toward mastering skills rather than just mastering a profession.
- In parallel to STEM (and/or STEAM – science, technology, engineering, arts, and mathematics) create a hybrid

Education/ learning systems should shift more toward mastering skills rather than just mastering a profession

system of self-paced inquiry-based learning for self-actualization; retrain teachers as coaches using new AI tools with students.

Culture, arts, and media

- Repurpose libraries, old post offices, movie theaters, national parks, museums and “maker spaces” as “creative placemaking” hubs for integrating the arts and community building – a nexus for creative contribution, life-long learning, cultural exchange, and NT/ digital connection.
- Produce movies, music, TV shows, computer games, and immersive media with more positive storylines that portray how the culture of augmented humans could evolve without prejudice and conflict with non-augmented humans.

- Support joint cultural activities with other countries that re-enforce new values to help the transition to the next rapidly changing technological/economic realities.
- Establish associations, communities of practice, and/or arts/media alliances to create and help new social movements with themes such as self-employment as the new norm, technology to augment human capacity rather than replace humans, the self-actualization economy, investing in what replaces you, eco-empathy, and good news in media about positive actions.
- Expand the purpose of work to self-actualization and moving from "my job is my identity, value to society, and source of dignity" to "my identity, value, and dignity is how I invent my life, how I give it purpose."

We should move from "my job is my identity" to "my identity is how I invent my life, how I give it purpose"

Taken together, these actions plus the full range of the 93 actions will make the transition to a new economics more humane, peaceful, and equitable.

Actions in each of the five categories re-enforce each other. Focusing on just STEM is not enough. We need actions for business and labor, government, culture and arts, and the S&T community, as well as actions related to education and learning. Comments on all the actions by the international panel give factors to consider in selecting and implementing each action.

There have been many “future of work” studies; why is this one unique? Because this one is an international rather than national study.

It included nine Real-Time Delphi studies, four for building the scenarios and five for identifying actions with the participation of more than 450 futurists, AI professionals, economists, artists, educators, scientists, engineers and other related experts from over 50 countries. It also focused on the global socio-economic long-range situation rather than on a specific industry in a specific country, over a shorter period of time.

Most studies looked at the impacts of artificial narrow intelligence and robots on work, not artificial general intelligence, quantum computing, synthetic biology, nanotechnology, and other next technologies and the synergies among them. The 2050 horizon was chosen because it helps us look not only at the primary consequences, but also at secondary and tertiary ones. It also allows enough time to talk about cultural changes that can help the transition to new economic/technological conditions. We did not find other future of work studies with detailed future scenarios and their use in national workshops to identify strategies to address long-range issues of work and technology. Hence, the focus of this research was on what we could do, rather than how many people will be unemployed by when. ▮

The focus of this research was on what we could do, rather than how many people will be unemployed by when

Interview with Alfons Cornella

Alfons Cornella is founder of Curiosity Atelier, Institute of Next, Infonomia and EDGERS, and he is probably one of the top experts in Spain when it comes to innovation. He has led more than 100 projects, and has published more than 30 books and over 1,000 short articles on science, technology, and innovation. He is a consultant for major companies, where he helps to build creative and transformative teams. Likewise, he spends part of his professional time delivering talks and workshops on business transformation or education, among other topics. His training was in Theoretical Physics, although he has never worked as a scientist. He also holds an MS in Information Resources Management and a postgraduate degree in Business. Lately, he has been coordinator of the **CAT2040 report** launched by the Catalan Government to inspire public policies in the next decade. That is why we have talked with him. If you want to learn more about the subject, the **full conversation** is also available in our YouTube channel. Direct, interesting and inspiring in equal measure.

"Either dare, or fail. There is no other way to solve the problems of the world other than the willingness to try new things"

"How we address the immigration issue is becoming a problem all around the world, especially in western countries. It will be critical to change our mindset, to make immigration a positive rather than a negative thing"

"Receiving people from other parts of the world is also a solution to our problems, depending on how we manage it. We must convert immigration into a positive thing that impacts society"

"There is a place in the world where the future is invented right now, and this is China. From the generation of value, from science and technology, obviously China is the place to study now"

"A first, very simple tool to start with futures thinking is to use artificial intelligence to summarize extensive reports that otherwise would be unreadable because we don't have time"

"People are already changing faster than public institutions. It would be quite interesting to see that, by fulfilling the needs of people that are complaining, actually, we are inventing the future"

Good practices

Futures4europe

Futures4europe is an online community where futurists, foresight experts, EU policymakers and engaged citizens come together to share their views on the future of Europe. Hosted by the **Foresight on Demand** (FOD) consortium with support from the European Commission, its purpose is to gather, showcase and share foresight activities related to Europe's future. The platform is open to anyone, bringing together foresight community members, EU policymakers and citizens. Among its diverse features, the **project database** is one of its main assets, allowing users to browse multiple foresight projects both within and beyond European borders. Other sections include research, blogs, news and resource suggestions from users. In particular, the **"Future Forward"** collection features 20 TED-Ed lessons designed to help young people explore and understand the future. In addition, the content brings together visions for the future submitted by European citizens, which are then analysed and shared with EU policymakers to offer insight into the ways citizens perceive the future. Also of interest is the **OECD Government Foresight Community**, which brings together public sector strategic foresight practitioners and leaders to exchange information and content on the latest foresight developments in government for better policymaking.

Futures toolkit (United Kingdom)

The UK Government's **Futures Toolkit** is a practical resource aimed at policy officials and analysts who wish to incorporate futures thinking methods into government strategies. The initiative, launched in 2014 and repeatedly improved and updated since, has been renewed in 2024 with the aim of enhancing the ability of policymakers to make informed decisions by anticipating and preparing for various future possibilities. The toolkit includes a range of practical tools and techniques for use by both novices and experienced practitioners. It includes an accessible introduction to futures thinking and contributions from government and industry experts, along with case studies demonstrating the practical application of these tools. The toolkit is one of a number of futures and foresight resources offered by the UK Government Office for Science (GO-Science).

These include ***A brief guide to futures thinking and foresight***, which helps civil servants understand the basics of foresight practices; **Trend Deck**, which highlights various long-term trends relevant to UK policy decisions; and the **National Risk Register**, a document that reflects a deeper understanding of the risk landscape facing the UK on multiple fronts.

Next Generation Foresight Practitioners (global)

Next Generation Foresight Practitioners (NGFP) is an initiative launched in 2018 by the **School of International Futures** as an awards programme to recognise and support young leaders and innovators who use foresight and futures thinking to drive positive change globally. Nowadays, the programme not only celebrates winners but also brings together a diverse network of future-focused practitioners, with members in over 90 countries across six continents, all working collectively on foresight practices. One of the key components of NGFP is its **fellowship programme**, targeting practitioners between 18 and 35 years old as well as older people who have embarked on a new career as foresight practitioners in the last five years. Once selected, NGFP fellows receive a small grant to focus on their foresight projects and embark on a journey of learning, skill-building and exchange. In addition to their fellowship year, fellows remain part of a global network, gaining long-term access to ongoing support, collaborations and opportunities. Due to the efforts of this network of young professionals, seven pilot projects have been launched through global collaboration among NGFP members.

Foresight studies repository (Catalonia)

The **foresight repository** of the Government of Catalonia aims to be a source of information regarding articles, studies, references and projects for those interested in futures and foresight. Although only available since May 2024, the repository already incorporates upwards of 200 documents from more than 70 institutions and organisms all over the world. To ensure that its content remains up to date, a collaborative approach allows users to contribute to the foresight repository by suggesting new studies or materials for inclusion. The repository covers a wide range of topics such as climate, technology, innovation, energy, society, and inequalities. Each report includes a brief summary, offering users a clear idea of the content before accessing the documents. This is an example of a number of initiatives promoted by the Catalan Government in the field of futures through the work of its Directorate General for Analysis and Foresight. Another important project is the **subjective well-being indicator**, which seeks to evaluate and gain insight into Catalan citizens' perception of their own well-being, using the information obtained to shape public policies and target the most important aspects to improve citizen quality of life. A visual tool allows users to explore key factors affecting well being, such as health, family and work life, and a results report is accessible on the Directorate General's website.

Foresight governance in Finland

The Finnish Government takes a proactive approach to future planning through several key foresight initiatives. A central feature is the ***Government Report on the Future***, a strategic document addressed to the Parliament of Finland and issued during each electoral term. The report aims to identify issues that will require particular attention in the following years and guide long-term decision-making by considering scenarios that could shape the country's future. The **January 2023 report**, issued in January 2023, focused on the future of climate and the welfare society. In addition, the **National Foresight Network** connects government bodies, businesses, research institutions and civil society actors in Finland to enhance preparedness for future challenges. This network fosters collaboration across sectors to address issues such as an ageing population, technological advancements and climate adaptation. Finland also places foresight at the heart of its legislative processes through the Futures Committee in the Finnish Parliament. As explained in an article in the journal ***European Public Mosaic***, this parliamentary body assesses strategic risks and opportunities, ensuring that Finland's legislation aligns with long-term societal trends. This integrated Finnish approach to foresight helps ensure that future-oriented thinking is embedded in both governmental and legislative decision-making, contributing to developing a forward-looking and resilient policymaking process.

Nesta Discovery Hub (United Kingdom)

Nesta – formerly the National Endowment for Science, Technology and the Arts – is a UK-based innovation foundation focused on driving social change through innovation. The **Discovery Hub** is one of the main units within Nesta, and includes a team of 10 professionals specialised in foresight practices. The unit uses strategic foresight, data science and other techniques to explore emerging trends in a variety of fields such as technology, health, education, and the environment, aiming to provide insights that can inform policy and innovation practices. It frequently publishes articles, reports, news, blogs and data related to foresight and future studies. In particular, in the annual **"Future Signals" collection**, different signals – data points, observations or insights that indicate potential future trends – are identified and discussed in the articles proposed in the collection. This year's "Futures Signals" focuses on two themes that affect our immediate and long-term future: the environment and digitisation. Apart from publications, the Nesta Discovery Hub also promotes events and carries out projects in the field of strategic foresight.

Strategic foresight in Flanders

The **Flanders Chancellery and Foreign Office** is making efforts to strengthen its strategic foresight capacity. In June 2024, the OECD published a report titled ***The Strategic Foresight System of the Government of Flanders, Belgium*** in its series "Public Governance Reviews". The report analyses the importance of strategic foresight as a means of informing decision-making, analyses the particular strategic foresight system in Flanders, and proposes steps for advancing towards a multi-level strategic foresight model in the region. The report was complemented with a **blueprint and a roadmap** – designed in a collaboration of the Flemish Government and the OECD – for expanding strategic foresight throughout public and private entities in Flanders. The blueprint was presented at an **event** that took place on 29 May 2024 at the Living Tomorrow Innovation Campus, attended by experts from various European regions. This experience highlights ways that regional governments can also make proactive efforts to integrate long-term thinking in decision-making to address complex and global problems.

Welsh report: *Beyond the present*

The **Future Generations Commissioner for Wales** and **Public Health Wales** recently issued a joint report titled ***Beyond the present: How to apply long-term thinking to reduce health inequalities***. The report highlights the urgent need to manage current crises in the Welsh healthcare, public and third sectors while preventing further crises in the future. It also introduces tools and resources that promote long-term thinking and action, aiming to reduce health inequalities by guiding users through methods such as horizon scanning, the futures triangle, axes of uncertainty and scenario planning. By sharing case studies from Wales, the report demonstrates how these approaches can be applied to identify trends, create future visions and set strategic paths to achieve desired outcomes, offering practical solutions for both immediate and long-term challenges. This is one of the initiatives promoted by the Future Generations Commissioner for Wales, an independent role established under the **Well-being of Future Generations (Wales) Act 2015**, which aims to ensure that Welsh public bodies work towards long-term well-being goals.

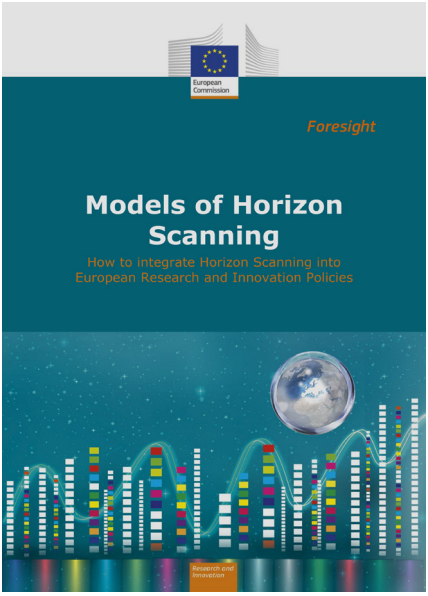
New trends

Megatrends

Megatrends are large-scale, transformative global forces that have a long-lasting impact in different policy areas and every aspect of life, for instance, technology, climate change, geopolitical shifts or migration patterns. Unlike short-term trends or fads, megatrends unfold over decades and shape the future by driving structural changes across multiple sectors. The analysis of megatrends has become a common foresight practice in the European Union and beyond. For example, Finland's fund for the future, **Sitra**, published a report titled ***Megatrends 2023: understanding an era of surprises***, analysing five key megatrends that illustrate the broad arcs of change currently prominent around us. In addition, in May 2024, the European Commission's Joint Research Centre published a **Megatrends Assessment Tool**, an accessible workshop that uses 14 megatrends to examine how systemic change could affect the future of a chosen topic. The participative workshop provides a framework to look at complexity and change in a systemic way, and examine how developments might affect the long term future of the topic chosen. Later, in June, the **Knowledge4Policy** platform launched a webpage named **The Megatrends Hub**, a portal for information, resources, and tools related to megatrends that affect the future of Europe.

Horizon scanning

According to the definition provided by the European Commission, "**Horizon Scanning** is the systematic outlook to detect early signs of potentially important developments. These can be weak (or early) signals, trends, wild cards or other developments, persistent problems, risks and threats, including matters at the margins of current thinking that challenge past assumptions". Horizon scanning has become a common practice in the field of foresight globally. For example, in the EU, the **ESPAS horizon scanning project** enhances the EU's early warning systems by fostering continuous, long-term reflection on emerging trends through collaborative reports. It is also building a community of experts in the field of horizon scanning, strengthening the EU's ability to anticipate future developments. Horizon scanning has also become commonplace in the field of health policy, as exemplified by **Canada's Drug Agency**, which frequently publishes reports on trends in public health, emerging technologies, and other aspects which may affect the health of Canadian citizens in the future. To learn more about this approach and its relation to strategic foresight, the Government of Alberta has produced a **didactic guide** that explains how to apply horizon scanning techniques through the example of a zombie invasion.



Manifestos for future generations

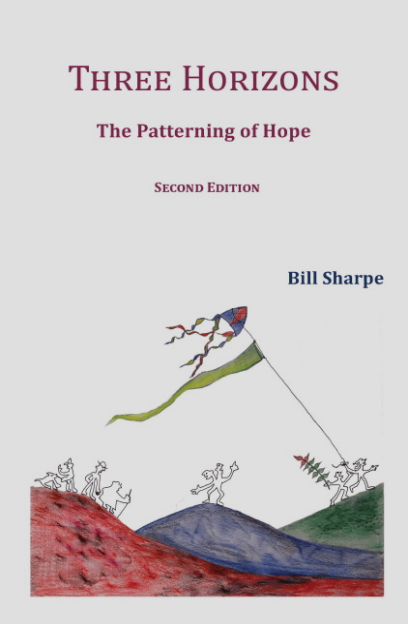
Manifestos for future generations are declarations of principles and actions intended to ensure the well-being and rights of individuals who are yet to be born. These manifestos are becoming a common tool to influence decision-making, push for certain policies in election periods, and promote long-term thinking by public authorities. There are several examples of this trend in recent years. The European Union's **Future Generations Initiative** is an interest group that pushes in favour of the interests of the generations yet to come. Its **manifesto** provides a roadmap for advancing the interests of future generations in European institutions, including the approval of an inter-institutional declaration on the rights of future generations, the appointment of a Future Generations Commissioner, and the inclusion of intergenerational justice as a key principle for any lawmaking. In January 2024, the UK's National Union of Students issued a manifesto titled **For Our Future**. The document aimed to influence political parties regarding the UK General Elections of July 2024, gathering the opinions and concerns of younger generations and proposing policies to improve citizen well-being in the future. A similar initiative was promoted in 2020 by the **Future Generation Commissioner for Wales**, who published a manifesto emphasising the need to strive for intergenerational justice, environmental protection, social equity and economic sustainability.

Evidence-based policymaking

Evidence-based policymaking refers to the practice of designing policies based on rigorous, systematic and objective evidence, bridging existing gaps between science and policy. For instance, science and technology advisory bodies to parliaments have become a common practice for supporting evidence based policymaking by providing objective, expert analysis and recommendations on scientific, technological and innovation-related issues. In particular, the **European Parliamentary Technology Association** (EPTA) network reunites different advisory parliamentary bodies across Europe and beyond. Its members include bodies such as **CAPCIT** from the Catalan Parliament, the **Oficina C** of the Spanish Congress, and the **U.S. Government Accountability Office**. Government administrations around the world are also promoting evidence based policymaking by different means, such as policy evaluation agencies, national statistical agencies, open data initiatives, foresight strategies, and independent policy research units. For example, at the European level, the **Joint Research Centre** of the European Commission provides independent, evidence-based science and knowledge to European Union (EU) institutions, supporting EU policies that positively impact society.

Three Horizons method

The so-called Three Horizons method is a foresight technique developed by the futurist and science and technology expert Bill Sharpe. The method was first exposed in his 2013 **book** of the same name, and was later improved on by strategic foresight researchers and practitioners in response to the growing need for organisations to navigate uncertainty and complexity in rapidly changing environments. The main asset of the method is that it simultaneously combines the analysis of three perspectives or "horizons": the current state of affairs and immediate future; emerging trends and innovations that begin to disrupt the status quo; and transformative changes and long-term possibilities. In relation to this trend, the **International Futures Forum** provides a range of resources designed to help individuals and organisations to apply the method, including practical guides, examples and "navigation dilemmas" related to the approach. The organisation also offers workshops or training on demand to develop the practical knowledge needed to apply the method. The **International Trading Centre** has also produced a practical guide for the application of the Three Horizons approach, combining the principal theoretical insights with practical guidance for putting the framework into practice.



Future of work

The future of work has become a central theme in foresight studies as technological advancements, such as artificial intelligence, automation and digital platforms continue to reshape labour markets globally. As an example, the European Commission's Joint Research Centre (JRC), in collaboration with the European Union (EU) Directorate-General for Employment, Social Affairs & Inclusion, conducts **research on the changing nature of work** to help anticipate challenges, capitalise on opportunities, and protect workers' well-being while promoting optimal working conditions. For instance, the JRC and the International Labour Organization promoted a joint action named **Building Partnerships on the Future of Work**, an initiative that seeks to build strategic alliances and develop evidence-based insights to ensure sustainable solutions for both EU and non-EU regions. Recently, we have also seen the publishing of various reports on the future of work regarding emerging technologies and future jobs. As an example, a recent European Policy Centre (EPC) report titled ***AI and the future of work*** analyses how the development of artificial intelligence might affect productivity, automation and workplace conditions. Additionally, within the framework of the European Year of Skills, the Centre for European Policy Studies (CEPS) launched the report ***Shaping tomorrow's workforce: EU policy priorities for skills***.

Newsflash

5th Digital Government Congress

The **Digital Government Congress** is an event that brings together professionals and stakeholders from around the world to exchange knowledge, share experiences and showcase best practices, services and solutions related to the digital transformation of public administrations in Catalonia and abroad. The fifth edition of the Congress will take place this year in Barcelona, focusing on the **Declaration on European Digital Rights and Principles**, along with the strategic programme for **Europe's Digital Decade 2030**. The key topics for this edition will include digital rights and training, people-centred services, services for companies, efficient administration, open government and good governance, smart governments, infrastructure and cybersecurity, cultural change and sustainability, and the Govtech ecosystem. The event will take place on 12–13 March 2025 at the Barcelona International Convention Centre.

ChangeNOW 2025 world summit

Echoing the 10th anniversary of the Paris Agreement, the **ChangeNOW 2025 world summit** will be held on 24–26 April 2025 at the Grand Palais in Paris. At the midway point of the 2020–2030 decade for decisive climate action, this event will feature solutions and bring together innovators, investors, policymakers and leaders around the topic of the transition towards a sustainable world. ChangeNOW 2025 will provide a platform to make connections, set actionable ideas in motion, and pursue lasting impact.

Participation is open to start-ups, NGOs, executives, investors, city councils, volunteers and media representatives. The 2024 programme themes include women, sport, finance, biodiversity, cities, energy, governance and tech for good.

Tomorrow Future 2024

The **Tomorrow Future (Demà Futur) 2024** event, organised by the Directorate General for Analysis and Foresight of the Catalan Government, is a foresight session that aims to reflect on the challenges that Catalonia will face in the future. The second edition, held on 27 September in Barcelona, in collaboration with **Future Days**, focused on three key areas: data, technology, and the use of information. The event began with a speech by Alfons Cornella, who presented the report ***CAT2040: Impacte a la Catalunya del 2040 de les tendències globals*** (available in Catalan), a document which collected the principal challenges that Catalonia is likely to face in the next fifteen years in terms of natural resources, economy and society. The event continued with various dialogues, bringing together internationally renowned experts on several topics including health and life sciences, climate change, and technological innovation. Lastly, a multilingual participatory lab centred on addressing the challenges explained during the event was held.

UN Pact for the Future

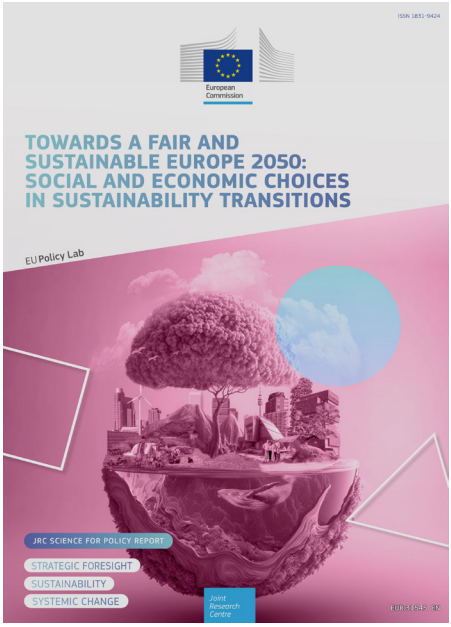
At the **United Nations Summit of the Future** on 22 September 2024, world leaders adopted the **Pact for the Future**, a comprehensive international agreement designed to modernise global cooperation in response to today's rapidly changing world. The Pact addresses a wide array of critical issues such as peace, security, sustainable development, climate change, digital cooperation, human rights and gender equality, with an emphasis on transforming global governance to be more representative and effective. This agreement emerged from an inclusive process involving millions of global voices, with follow-up actions outlined to ensure implementation of its promises. The annexes of the Pact also include two important documents: the **Global Digital Compact**, the first comprehensive global framework for digital cooperation and artificial intelligence governance; and the first-ever **Declaration on Future Generations**, with concrete steps to integrate the interests of future generations in decision-making, including a possible envoy for future generations.

Draghi's European competitiveness report

In order to maintain its global leadership, the European Union (EU) seeks to proactively shape its future by addressing new economic and technological developments that may influence its industries and businesses. In line with this, Mario Draghi, former President of the European Central Bank, was tasked by the European Commission (EC) to provide his vision on the future path that EU institutions should follow to achieve global competitiveness. His report, titled ***The future of European competitiveness***, examines the challenges faced by industries and companies in the EU single market and outlines strategies to ensure sustainable prosperity. European Commission President Ursula Von der Leyen and Mario Draghi presented the report at a **joint press conference** on 9 September 2024. The report's findings may play a pivotal role in the development of the EU's new Clean Industrial Deal, a plan intended to replace the current European Green Deal by fostering competitive industries and creating quality jobs, aligning with the Commission's broader goals for Europe's future.

2023 Strategic Foresight Report

On 6 July 2023, the European Commission issued a communication to the European Parliament and the European Council, comprising its **fourth annual Strategic Foresight Report**. The 2023 edition provides a roadmap for the EU to successfully manage a transformative process, balancing economic, social and environmental goals while positioning itself as a leader in the global shift toward sustainability. The report highlights the crucial role of reaching climate neutrality and advancing sustainability to secure the strategic independence of the European Union, long-term competitiveness, and global leadership in a future shaped by a net-zero economy. The communication draws from a Joint Research Centre's Science for Policy Report, titled ***Towards a fair and sustainable Europe 2050***, which examines the social and economic implications of pushing for sustainability transitions at the European level.



Spain 2050

The ***Spain 2050*** report is a strategic foresight initiative launched by Spain's National Office of Foresight and Strategy in 2021 with the objective of preparing Spain for future social, economic and environmental challenges while fostering a shared long-term vision for the country. Developed by a multidisciplinary team of over 100 experts, the report outlined nine major challenges Spain must address, and proposed 200 policy actions, along with 50 measurable goals, to guide the nation's progress toward matching that of Europe's most advanced countries by 2050. Then in November 2023, during Spain's presidency of the Council of the European Union (EU), Spanish President Pedro Sánchez presented a document titled ***Resilient EU2030***, a roadmap developed by more than 250 experts and 80 ministries from the 27 Member States, which aims to guarantee a forward-looking approach to ensure the EU's Open Strategic Autonomy agenda and global leadership by 2030. Both initiatives emphasise the will of the Spanish Government to advance strategic foresight through a collaborative approach that involves government bodies, businesses, unions and civic institutions in strategic foresight activities.

Global Trends to 2040: Choosing Europe's future

Shortly before this year's European Parliament elections, the **European Strategy and Policy Analysis System** (ESPAS) issued a report titled ***Global trends to 2040: Choosing Europe's future***. The report examines major global trends and their potential impact on the European Union (EU), presenting strategic options and key questions that Europe's leaders may need to address in the current institutional cycle regarding the future of Europe. This is the fourth global trends report issued by ESPAS since its creation in 2010, as an EU inter-institutional entity that promotes foresight and anticipatory governance. The report covers topics such as the shifting geopolitical landscape, the environmental crisis and the transition to sustainable energy, or the threats and opportunities affecting European democracies. The report was launched at an **event** that took place on 17 April at the headquarters of the European Parliament.

The present and future of electric bikes

Moto Club Moianès (Barcelona) organised its first **Ecofira and Ecofòrum** with the slogan "I live in the future" on 21 and 22 September 2024 at the Moià Green Circuit. The club, which is basically dedicated to off-road motorbike competitions and which has celebrated its 50th anniversary, promoted a reflection on the mobility of the future and new technologies, where electric motorbikes are set to play an important role. The meeting was attended by manufacturers, prototype workshops, private initiatives for the handcrafted manufacture of electric competition motorcycles, university research teams, user groups, individual bikers, representatives of the Catalan Motorcycling Federation and various government agencies. Discussions focused on the technological transition towards more sustainable mobility models. Among other conclusions, they identified a need to promote vocational training degrees in this field, given the lack of specialised labour; an opportunity to recover the important motorbike industry that disappeared in Catalonia in the 1980s; and the importance of streamlining legal and bureaucratic procedures in the transition from combustion vehicles to electric vehicles.

Alfons Ortuño Awards

The Public Administration School of Catalonia (EAPC) presented the **7th Alfons Ortuño Awards** for Innovation and Good Practices in Public Management, promoted by Catalan public administrations in Barcelona on 13 November. The winners of the first price this year's edition of the awards are the Directorate General for Digital Services and Citizen Experience of the Catalan Government, in the category of Organisation, processes and economic management; the Directorate General for Public Procurement of the Catalan Government, in the category Transparency, good government, assessment and quality; the Sant Boi de Llobregat City Council (Barcelona), in the category Team and people development; and the Mataró City Council (Barcelona), in the category Citizen services. This edition of the awards, with the slogan "Ideas born to be for all", received 34 candidacies from public administrations of diverse levels of governments. The award ceremony was chaired by the Secretary General of the Presidency Department, Eva Giménez Corrons, the Secretary for Administration and Civil Service, Alícia Corral Sola, and the director of the EAPC, Jaume Magre Ferran. The awards honour the memory of Alfons Ortuño, who was one of the architects of the public finances of the Government of Catalonia restored after the Francoist dictatorship. The 2024 awards session can be retrieved from the School's **YouTube channel**.

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