ISSUE 1

HORIZON FUTURES WATCH

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PRESENTED BY

Foresight On Demand

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Dear reader,

Welcome to the first edition of Horizon Futures Watch, a newsletter showcasing the latest findings from foresight in the EU Framework Programme and the futures4europe.eu platform. It is aimed at a growing community of decision-makers, experts, practicioners and other people interested in foresight, R&I policy and european affairs promoting the wealth of thinking generated in the context of different projects financed through Horizon Europe as well as other foresight-related activities and exercises conducted by the European Commission.

The newsletter is written by the Foresight on Demand Consortium, which provides support to the European Commission of foresight in the area of research and innovation, and is connected to the Horizon Europe Foresight Network – a network of Commission staff connecting all policy departments involved in the Horizon Europe R&I programme.

This issue features articles on foresight in R&I projects covering two themes: Land and Sea Use and the Future of Social Confrontations. The theme of Land and Sea Use looks at Horizon projects that explore issues of increasing demand for land-and-sea resources for human activities such as agriculture, housing, transport, and industry, and the complications associated with climate change. The theme of Social Confrontations explores social dilemmas like inequality, discrimination, and ideological divisions.

It starts with a selection of news on foresight projects and publications from Europe and the world. A section on Foresight in the Field reports on a Mutual Learning Exercise to foster knowledge exchange for an impactful foresight community in nine european countries.

The section on Foresight on Land and Sea Use includes:
Addressing the degradation of ecosystems through scenario making – The project BioDivScen uses foresight to address ecosystem degradation.
'Going rural' - Managing Land Access (and Use) to support rural futures – The project RURALIZATION promotes synergies between policymakers and rural communities to paint attractive rural futures.
Harvesting Hope: Future-Proofing Plants for Bountiful 2050 Crop Yields – Through scenario-making, the project CROPBOOSTER-P aims at making crop production more resilient in the face of future challenges.

The Future of Social Confrontations section covers:
From Reactive to Proactive: Cultivating a Culture of Foresight for Post-Pandemic Governance - The REGROUP project analyses the consequences and normative implications of the COVID 19 pandemic.
How Combining Participatory Democracy and Foresight Practices Can Foster Political Innovation – Inclusive participatory democracy coupled with media discourse analysis foster a holistic futures thinking approach in this EU-funded EUARENAS project.
The Changing Face of Public Protest – An interview with an expert on social confrontations offers a glimpse into the evolving nature of street protests and online activism.

The newsletter concludes with selected content from on-line platforms and reference to oncoming events:
Stories4Europe – Short fiction offering a creative account of the point of view of a clairvoyant from 2050.
Futures4Europe – Blog articles on Deep Sea Mining and the Hydrogen Economy
Upcoming events and dates to look out for – Events and workshops related to foresight worth exploring.

We hope you enjoy reading and using this newsletter,

Sincerely,

Alexandr Hobza,
Chief Economist, RG R&I, European Commission
and
The Editorial Team of Foresight on Demand (Hywel Jones, Laura Galante, Alexandre Lotito, Giovanna Giuffré, Loredana Marmora, Valentina Malcotti)

NEWS

Title: “How will we Disgust our Descendant?”
Date: 2 March 2023

A joint initiative led by the Polish Society for Futures Studies and The Futures Literacy Company to investigate what aspects of our modern-day existence could elicit feelings of repulsion and disgust from future generations. You can **find the whole report and infographics here.** This report has also been the subject of a blog entry by the Millennium Project, which you can find here.

Image: 4cf.eu

Title: "Five scenarios for the business landscape in Europe towards 2045" (In Greek)
Date: 26 February 2023

A newspaper article published in the Greek newspaper “The Liberal” based on a study led by Themis Foresight on the future of business landscape in Europe. As uncertainty in the business world increases, this study aims to assist executives in navigating this uncertainty and taking specific actions. This article highlights the five scenarios proposed in the study.

Photo: liberal.gr

Title: The European University Association is launching the new “Universities and the future of Europe” (UniFE) project
Date: February 21, 2023.

EUROPEAN UNIVERSITY ASSOCIATION

Image: EUA.eu

The European University Association is launching the new “Universities and the future of Europe” (UniFE) project to develop concrete ideas about what Europe’s universities want from future collaboration. The article outlines the goals of the project, and the upcoming milestones of the initiative.

Title: State of the Future
Date: February 14, 2023

Photo: futurized.org

In a new episode of the Futurized Podcast, **Trond Undheim interview Jerome Glenn** about his work at The Millennium Project, discussing the many potential risks and uncertainties that could impact the future of humanity, the State of the Future, futures research methods such as the Delphi and the Futures Wheel, Artificial General Intelligence, Cyber Crime, and much more. You can find the link to the podcast here.

Title: The Ideal of Pluralism and the Problem of Online Polarisation. Four Scenarios and Five Proposals for the Future
Date: March 2023

Image: jfsdigital.org

Digital platforms lead individuals to closing themselves off in echo chambers and filter bubbles. In this paper, Gabriele Giacomini, and Roberto Paura, attempt to model some scenarios in order to determine the potential consequences of the development of digital platforms on democratic pluralism.

FORESIGHT IN THE FIELD

The Mutual Learning Exercise

By Emma Coroler

Sharing lessons learned in foresight practices and experiences is important for the exchange for an impactful foresight community. The Mutual Learning Exercise can help foster community building and foresight capacities in different member states.

Image: ec.europa.eu

Foresight studies, previously known as future studies or futures research, have a rich history dating back to the 1960s and 1970s. Over the years, these studies have expanded significantly in many countries, especially in the field of research and innovation (R&I).

As we face rapid changes and uncertainty in today's world, there is a growing demand for policymakers to incorporate systematic foresight into their decision-making processes. By providing strategic intelligence and a long-term perspective, foresight can help governments better anticipate future opportunities and challenges. The OECD has emphasized the need for all governments to build greater anticipatory capacity and stresses the importance of institutionalizing the use of strategic foresight in R&I policy. Indeed, foresight has proven instrumental in informing the design and implementation of R&I policy through three distinctive roles linked to targeted impacts: corrective (addressing systemic failure and policy lock-ins), disruptive (focus on crisis and transition), creative (stimulating enabling conditions for new structures)

The EU's response to ongoing crises and future challenges involves addressing this growing demand for strategic foresight. This includes efforts to create a European foresight community by connecting national institutionalized foresight. This strategy is notably being developed in the context of the European Commission-funded **Mutual Learning Exercise (MLE)** on research and innovation foresight (R&I foresight).

The MLE aims to create a platform for the exchange of valuable information, experiences, and innovative practices in the field of research and innovation (R&I) foresight across EU and associated countries. By fostering collaboration between different groups, the MLE seeks to inspire the development of impactful R&I foresight communities as an important element of the European Research Area (ERA).

The MLE is focussing on **5 topics** that have led or will lead to the publication of thematic papers:

- Overview of R&I foresight.
- Institutionalising foresight capability creating wide foresight communities in the R&I system.
- Citizens' engagement approaches and methods.
- Foresight, the twin transition, and potential disruptions.
- From foresight for Smart Specialisation to engagement in EU Research Programmes, Missions, and Partnerships.

The first thematic paper examines the current state of foresight in the EU, including practices at the national level in both public and private sectors, success factors and challenge to future foresight practices.

The second thematic paper, published in March 2023, delves deeper into the challenges and success factors for research and innovation (R&I) foresight. The paper explores how government foresight plays a role in various countries, the foresight community building process across Europe, and the main findings of a dedicated survey conducted as part of the Mutual Learning Exercise on foresight between October and November 2022.

The first part highlights the diverse approaches and experiences of Member States and other advanced countries that have contributed to an expanding role for government foresight. The paper identifies parameters that significantly influence the extent to which foresight plays a role in government, such as the country's size and location, the maturity of policy context, the level of internationalization, and the success of institutionalizing foresight.

In the second part, the focus shifts to the European level, highlighting opportunities to create a European foresight community, building on existing institutionalized foresight at the national level. It also discusses recent strategies put in place such as the EU-wide Foresight Network, EU Foresight-on-Demand, or the Foresight Europe Network of the Millennium Project. The final part of the paper covers the key findings of a dedicated survey conducted as part of the Mutual Learning Exercise on foresight between October and November 2022.

These thematic papers as well as those still forthcoming share the goal of advancing the development of a community and enhancing the capacity of member states to take part in foresight and R&I policy planning through enhanced knowledge-sharing, cooperation, and active learning.

FORESIGHT ON LAND AND SEA USE

Addressing the degradation of ecosystems through scenario-making

By Emma Coroler

The key to biodiversity's preservation? Fostering collaborations between the scientific community and policymakers by using a future-oriented mindset.

This image was generated with the help of GPT-3.

The agreement made by the UN member states on the 5th of March on the protection of marine biodiversity in international waters signals the increasing importance of biodiversity preservation on the international political agenda. It stresses the urgent need to conserve and sustainably use the Earth's biodiversity, considering the rapid extinction rates around the world's most important nature sites.

It took more than 10 years of negotiations to reach this agreement, which highlights the complexity of balancing competing interests among different countries and stakeholders to address the concerns arising from scientific evidence. The European Union is also taking steps to tackle these challenges and develop effective measures for biodiversity preservation, as part of the European Green Deal.

Additionally, the EU's Horizon 2020 Framework Programme includes several initiatives aiming at research for the protection and preservation of biodiversity, including the 21 BiodivScen research projects funded by the BiodivERsA network, the predecessor of the European Biodiversity Partnership (Biodiversa+), jointly with the Belmont Forum. BiodivScen is one example of a programme that uses scenario-making as a core component of its research. The programme aims to develop and evaluate scenarios of future changes in biodiversity and ecosystem services, and to provide decision-makers with information and tools to support effective biodiversity conservation policies and practices.

The growing degradation of plants, animal species and ecosystems, providing essential services to humans, calls for new approaches to protect our biodiversity. Scenario-development, as well as an increased engagement of stakeholders, could be the cornerstone of a renewed ambition for mitigating the negative effects of human activity on biodiversity.

Magnus Tannerfeldt, Programme coordinator of BiodivScen, Vice chair of Biodiversa+, and expert of The Swedish research council for sustainable development (FORMAS), is a firm believer in training and building capacity for policy making.

Tannerfeldt highlights the need to consider a range of potential future scenarios in order to identify risks, develop strategies, prioritise actions, and improve decision-making. By developing and testing multiple scenarios, stakeholders can gain a better understanding of the complex interactions between biodiversity, human activities, and environmental change, and can identify more effective strategies for promoting positive outcomes, such as addressing the causes of biodiversity loss, implementing sustainable management practices in agriculture, and ensuring that biodiversity conservation and management are integrated into all relevant policies and programs at local ad international levels.

BiodivScen is part of a broader trend towards using scenario-making as a key tool for biodiversity conservation and sustainability[1]. Other initiatives, such as the Nature Futures Framework developed under IPBES, aim to develop scenarios of positive futures for nature. The framework incorporates various knowledge systems across multiple scales and sectors to help inform assessments of science-based policy options.

1 For a handbook on the use of biodiversity scenarios, see: https://www.biodiversa.org/1823/download

Beyond the development of scenarios, a better connection between scenario-making and policymaking is crucial to ensure that scientific knowledge is effectively used to inform decisions. “There is a need to strengthen the production of knowledge for monitoring biodiversity, for the research, for systems analysis, for scenario making”, Tannerfeldt says, to better inform decision-makers in the public and the private sector.

He emphasises the importance of training and building the capacity of decision-makers for incorporating scientific findings in policy-related decisionmaking. Therefore, there is a need for increased efforts to inform decision-makers on the potential benefits of using scientific data and analysis in policymaking leading to more informed and effective policies.

What’s more, it will be crucial to increase public awareness and citizen engagement to ensure that biodiversity preservation is addressed by many different interest groups. That’s why, in the future, Tannerfeldt hopes that biodiversity preservation will become a central and transversal theme of society debates. For this to happen, there is a need for a change in the dominant narrative around biodiversity preservation. “Negative scenarios have dominated too much”, he says. “There is a need to create narratives that look at the possibilities and what we need to do, scenarios and models of a desirable future, to give hope to people”.

Different forms of regulations will be needed to ensure that policies are designed with a focus on long-term sustainability rather than short-term gains. That is notably the case for the regulation of agriculture, fishing, forestry, and over-harvesting.

On a more practical note, the Programme coordinator argues in favour of the “de-compartmentalisation of policymaking to encourage strategic long-term integrated thinking at all levels”, which could be driven by the creation of scientific advisory bodies ensuring that policies are based on the best available scientific evidence. “Our hope would be that the real societal transformation that we see is needed, is at least beginning to happen in several cities, regions and maybe countries, where you could integrate nature, economy and human wellbeing.” By using these tools, we can better understand the complex and far-reaching impacts of human activities on the environment and take the necessary steps to protect and restore biodiversity before it’s too late.

‘Going rural’ - Managing Land Access (and Use) to support rural futures

by Giovanna Giuffrè & Valentina Malcotti

Renewing rural generations, via the provision of green jobs and accessible farming enterprises, has powered the EU-sponsored RURALIZATION project looking to promote synergies between agriculture policymakers and local rural communities in painting attractive rural futures.

If the keyword in the use of land, from the 18th century onwards, was ‘urbanisation’, concentrating on industrialisation and city expansion, the current environmental challenges, including food security and carbon emissions, make a strong case for ‘ruralisation’.

Sustained and long-term efforts to foster the regeneration of rural areas in Europe should take the stage to rebalance soil protection, shift economic activities to rural areas to safeguard local food supply chains and cater for the loss of biodiversity which is bound to negatively impact planetary health. Inverting the urban-centric trend requires re-thinking land use and identifying strategic issues that contribute to lowering pressure on cities, repopulate rural areas with new generations of farmers, and ensure the sustainability of the whole process. Behind the Horizon 2020 RURALIZATION initiative is the desire to make rural areas more appealing to new generations of farmers and inhabitants.

This image was generated with the help of GPT-3.

Embracing rural futures

A true rural regeneration is only possible if issues such as limited choice of services, fewer job opportunities and isolation due to poor connections are properly addressed.

However, before diving into the improvement of the quality of life in rural areas, Professor Willem Korthals Altes, coordinator of the RURALIZATION project has no doubts: “Access to land is one of the key widespread barriers to entering farming as land ownership is largely concentrated in large companies or long-standing family businesses, driving away rural newcomers.”

As a Professor in Land Development at the Faculty of Architecture and the Built Environment of the Delft University of Technology (TU Delft) in the Netherlands, Korthals Altes is an expert in governance of land development and a connoisseur of the legal complexities of modern land use.

To get young generations on the fields, running small farms (with an eye to sustainable agricultural practices), and replacing retiring farmers, the land must be accessible! This is why RURALIZATION has not only united research organisations in rural policy brainstorming but also members of the Access to Land network, to formulate solutions and recommendations responding to the diverse needs and features of rural areas in Europe.

RURALIZATION’s efforts towards promoting a constructive dialogue between actors from all levels of the agriculture chain around the allocation and use of land has led to a tangible result: a Handbook intended to support local authorities in ‘regenerating’ their rural areas. It offers ideas, tools, and field-based examples to inspire and enable local authorities to take action across Europe to protect farmland and make it work for the public good.

To inform a forward-looking policy able to facilitate the settlement of new rural generations, RURALIZATION makes use of foresight. Foresight analysis was first employed to identify, through an exploratory analysis of megatrends, trends and weak signals, a large set of inclinations potentially having an impact on rural regeneration in thinking about rural futures. To better understand what the expectations are for a location to

qualify as a ‘dream area’ and what kinds of people are dreaming about specific types of (rural) areas, an inventory of future dreams among the youth was carried out in 20 regions across 10 EU countries.
“The result of asking 2,000 young people about their dream lives for the future has naturally yielded 2,000 different dreams”, says Korthals Altes, “but what we have noticed, in general, is that an increasing number of people hope to live more rural than where they are living now.” To turn these rural dreams into reality it is central to build both an accessible system for young people to make their income in rural activities as well as provide the infrastructure for them to have the desired quality of life in a non-urban context. In this respect, bucolic coastal areas have a high development potential and can provide a whole range of attractive socio-economic opportunities.

Land access, farming and stewardship: informing policy to paint rural futures

These foresight methodologies allowed RURALIZATION to develop a potentials matrix as a synthesis of the assessment process of rural trends and dreams. This output may serve as a benchmarking tool for a high-level vision of what is considered beneficial by stakeholders, experts and researchers in various types of rural settings. Local applications of foresight tools such as the potentials matrix may support European, national, regional and local actors in their assessments of alternative futures for their rural regions.

How these futures will look depends on the course that governance of land and nature will take: “As land and nature are clearly also important investment goods, funds and environmental values are not always aligned”, notes Korthals Altes, “but if you want to protect nature you must take action not only in terms of regulating land allocation but also in terms of shaping the ‘marketing’ of how land will be managed by people in an environmentally-conscious manner.” Within the wider rural scenario, special attention should go to making a wiser use of coastal areas, promoting activities such as aquaculture production or the restoration of coastal wetlands.

“Most EU agricultural policy is still guided by 1950s ideals which don’t take into account the current soil health scenarios and the fact that, to meet Green Deal objectives, the Common Agricultural Policy (CAP) has to be re-structured to cater for an agroecological management of land”, says Korthals Altes. Currently, most subsidies coming from the Common Agricultural Policy are not supporting pathways for land acquisition by new farmers who are willing to engage in green developments.

Looking at the social agenda, there is a need to consider who is managing the soil, which groups are ‘invested’ with its stewardship and how this is passed on. Part of the structural change needed in rural settings is not only a generational one, linked to the need to replace the aging population of farmers, but also to make the agricultural system more inclusive in terms of gender balance: “Land management is still a very masculine and patriarchal business, often tried to strict kinship-based structures; it’s almost impossible for people without a family-base in farming to step in”, Korthals Altes observes, “We have to move into the direction of facilitating new actors in joining, with social models that reflect current times”.

Making ruralisation the norm, not the exception

Korthals Altes is a firm believer that the future, including our agriculture and soil management, is what we make of it today, which paths humanity chooses to embark on by taking well-informed actions. A shift in people’s lifestyles towards ruralisation can be instrumental to boost sustainable agro-practices and re-balance the distribution of production, resources, and people from high-polluting urban settings to well-connected rural ones. To ‘go rural’ it is paramount to make this regulation of land ownership and access ideally integrated by innovative and participatory land policy instruments.

The time is ripe to invest in more sustainable and agroecological uses of land: “Initiatives such as the Green Deal and the Farm to Fork are going in that direction but the scale and pace at which things are happening are worrying; too little, too slowly…”. The current outcomes of nature protection actions and policies already reflect this urgency: “Sure, we are seeing certain plants and animal species coming back but the negative developments still outweigh the positive ones”, reckons Korthals Altes.

Harvesting Hope: Future-Proofing Plants for Bountiful 2050 Crop Yields

By Laura Galante

Considering prevalent trends, such as population growth, increasing demand for animal protein, land use change, and resource scarcity, a blueprint for future crops may help prioritise sustainable and efficient agriculture practices, as well as improved food systems. CropBooster-P, funded under the Horizon 2020 Programme, is a project that aimed to find a solution to this question by looking into innovative crop-breeding technologies for improving climate adaptability, resource use efficiency, yield, and quality.

You are standing in front of four doors that lead you into different realities for the year 2050. The first one guides you into a world in which high-quality food is sustainably harvested through innovative solutions, providing large volumes of feedstock for a thriving bioeconomy. The second door opens to a scenario in which people drive the preferences and concerns for health and agriculture, determining what farmers can grow, and businesses must exercise the utmost transparency in food production practices. The third door leads you to a bleak setting, in which European countries are struggling to meet basic food demand and technology reigns supreme in order to mitigate this state of emergency. And finally, through the fourth door you see a society that is extremely food-technology averse, polarised, and distrustfuly of its politicians. Food choice is scarce, and prices have become disproportionate. Which door is most likely to swing open to a concrete reality? The answer could be a combination of two or more of these.

This image was generated with the help of GPT-3.

It is widely recognized that food production systems are expected to face significant pressure in the coming decades due to trends such as climate change, population growth, and unsustainable land use practices. Therefore, what are the ways in which crop productivity can best be equipped to resist and overcome these factors, in other words be made “future-proof”?

Coordinated by René Klein Lankhorst, Senior Scientist and Programme Developer at the Plant Sciences Group of Wageningen University and Research, CropBooster-P was finalised at the end of 2022 and the resulting roadmap for how to improve crop yields in Europe was presented to the European Commission after seven years in the making. This roadmap lays out the design for a large pan-European consortium that aims to execute the research agenda over a period of 10 to 15 years. The new phase thereafter aims to ensure that this roadmap will be followed up and executed with support of the European Commission.

Cropbooster-P used a combination of scenario-building methods, stakeholder engagement, and scientific research into the current state-of-the-art in the field. These methods were used to develop a roadmap presenting the different scenarios above for future-proofing crop plants, as well as including a plan for developing and implementing the suggested research.

“In these scenarios, we are using all kinds of current trends and making an extrapolation of what direction the future will take,” Klein Lankhorst notes. “These four extreme scenarios remain in the boundaries of what will be possible. Of course, the real future will look like something in between.” Envisioning these different realities can help determine what kinds of crop improvements are allowed or needed. The scenarios should be highly unlikely, but not impossible, and they should not overlap with each other, but rather account for a wide range of possibilities.

One of the key components of the project was engaging stakeholders in the conversation. Initially, plant scientists were involved in the development of these four scenarios, as well as other industry leaders from the food and plant industry. The results were then presented to the wider community, such as farmers, the breeding industry, consumers, and other scientists, who refined their strategies and the scenarios. This was done in workshops, surveys and in **citizen juries**, particularly to obtain citizens’ opinions on new **breeding technologies**, a highly controversial topic. Citizens’ juries consisted of a cross-section of the population in terms of age, gender, education, and attitude levels towards the technology.

Klein Lankhorst stresses that even when opinions initially differ on a subject, new viewpoints can always be formed. “At the beginning, the tendency was that people were against the use of new breeding technologies, but after two days of intense discussion, they were more prone to agreeing to their effectiveness under certain conditions, such as that they are safe, affordable, well-regulated, and only used in situations highly relevant to society at large.” The exercise showed that involving the broader society in complex, scientific questions by explaining the subject thoroughly, weighing the pros and cons, and leaving space for independent judgment, it is possible to come to well-informed opinions that may be different to initial preconceptions.

With a view towards 2050, Klein Lankhorst wonders if we will manage to increase productivity to feed a global population and if we will do this without disrupting our natural ecosystem. In this sense, foresight can help to approach concerns and action points for ecosystem degradation early on, such as employing sustainable farming, selecting climate-adaptable crops, and increasing crop resource use efficiency. “It’s really important to identify these critical action points, what is important to do in the future, but also to try to find early indicators, to see whether we are heading into that kind of future.”

However, there are challenges, including the divergent time scales between policymaking and the development of biological solutions. While politicians plan for short-term mandates, plant breeding technologies and cycles take at least 20 to 30 years to develop. “I tell politicians we have to start now to solve this problem by 2050. What they define as a problem is not one we can solve in a current mandate period.”

Klein Lankhorst envisions a scenario that combines ecological farming with high-tech model farming in order to increase crop yields by 2050. Ecological farming makes use of methods that promote soil health while minimising the use of synthetic inputs such as pesticides and fertilisers, while high-tech model farming integrates cutting-edge technologies and data analytics to inform decision-making. Combining the two would leverage the power of technology to create more sustainable and efficient farming systems. However, Klein Lankhorst is concerned that policymakers think along either one or the other solution. ”I would really like for there to be a vision that could integrate things,” He hopes. “that these systems are not antagonists but can support each other and can be developed in synergy.” In this way, it could be possible to increase productivity on existing agricultural grounds without touching rainforests and biodiversity.

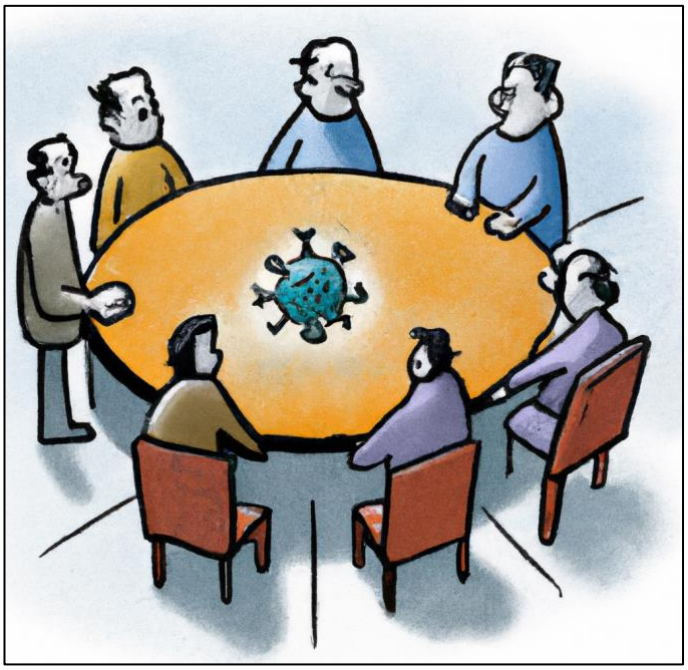
“The lesson is that for anything that you propose, technologically or otherwise, it’s important to involve society and consider the pros and the cons and developing products that benefit consumers directly. I am for using all available technologies, but we need to involve all of society to explain why are doing this and why it is so important.”

FORESIGHT ON SOCIAL CONFRONTATIONS

From Reactive to Proactive: Cultivating a Culture of Foresight for Post-Pandemic Governance

By Emma Coroler

Proposed scenarios about the future should come with a pinch of salt. Without being perfectly accurate, they help prepare policymakers for better or worse. The REGROUP project funded under the Horizon Europe programme aims to advise the EU on how to address post-pandemic policy and institutional challenges by analysing the societal and political consequences of COVID-19 and considering the normative implications of the pandemic.



This image was generated with the help of GPT-3.

The COVID-19 pandemic has highlighted significant inadequacies in global health governance, further exacerbated by an accumulation of economic, social, and institutional inequalities. However, such a crisis can also represent crucial turning points offering new prospects for political transformation. Entering a post-pandemic era, and looking back, one cannot help but note the record speed of technological advancements. And yet, the challenges of post-pandemic governance in Europe are particularly pressing and intricate, as they intersect with critical issues around the efficacy, fairness, and democratic nature of the EU's multi-level system. Furthermore, the COVID-19 crisis has underscored the importance of anticipating and preparing for future crises to establish a more robust governance framework by adopting foresight methodologies. As we look towards a post-pandemic European Union, it becomes imperative to consider how we can better manage global risks, enhance institutional and democratic resilience, and promote adaptable and proactive governance approaches.

Many initiatives have emerged to contribute to the revision of post-pandemic governance, including the REGROUP project funded under the Horizon Europe programme. The project gives priority to addressing the governance hindrances that have been observed during the COVID-19 crisis. Moreover, it delves into other important topics that have gained significance during the pandemic. For instance, the digitalization of society has become a vital aspect of our lives and its progress has been rapidly accelerating. Lastly, the project addresses global risks and challenges that existed prior to the outbreak of COVID-19, and seeks to provide insights that can mitigate their future impact by informing strategies and actions early on.

Launched in October 2022, REGROUP involves a consortium of 14 universities and think-tanks led by the University of Groningen, and is organized around a three-pillar methodology: diagnosis, evaluation, and prescription. By performing a diagnosis and evaluation of EU governmental structures, it becomes possible to pinpoint their strengths and weaknesses, identify areas of improvement, and determine implications for legal and institutional benchmarks. Starting in February 2024, the findings from the diagnosis and evaluation process will inform the development of prescriptive measures, in which the foresight component will be employed. The prescriptive measures will build on research done in previous work packages and provide advice for policymakers in various forms. For example, Work Package 7 (WP7), will focus on envisioning a post-pandemic European Union, based on the legal and constitutional reflection following the Conference on the Future of Europe. WP8 addresses managing global risks from institutional and societal perspectives, and informing policymakers on how these perspectives can inform the global stage. Lastly, WP9 explores potential digital strategies for democratic resilience. Each of these packages will deliver a foresight paper, which aims

to set an agenda for medium to long term (5 to 20 years) scenarios and trends. The foresight papers will also serve as a foundation for creating policy briefs that pave the way for future policy decisions and actions.

REGROUP's foresight methodology relies on a two-step scenario building process that incorporates both thematic and temporal approaches. The first step involves the identification of empirical situations and likely trends and mapping out the socio-political dynamics and consequences of the COVID-19 pandemic. The second step involves expanding the temporal scope to encompass a broader range of potential scenarios as the timeframe increases. As the time horizon extends, the more uncertainty is involved. “Think about it as a cone,” says Piero Tortola, scientific coordinator of REGROUP. “We start with a narrow set of scenarios and as you go further in time, the cone expands”.

Tortola strongly believes that it is important to cultivate a culture of foresight among policymakers. *“*The goal is not only to inform policymakers but also [foster] a context in in which policymaking is formulated on the basis of a long-view”. This is even more vital in light of the constant turnover of policymakers – the aim is that even when a political mandate ends, the culture of foresight will persist. Through this persistence, Tortola adds, you could “succeed in better preparing and grounding policymakers”.

While policymakers often rely on foresight as a tool, it should not be exclusively restricted to them. Tortola asserts that input from a variety of actors, such as civil society organizations and leaders, as well as citizens, is necessary for a holistic approach towards foresight. By incorporating diverse perspectives in the foresight process, policymakers can ensure that their decisions have been well-informed, based on plausible realities, and grounded on a comprehensive understanding of the issues at hand.

To this end, the consequences of the COVID-19 pandemic have further underscored the critical importance of this hostilic approach to building greater resilience and preparedness to deal with future crises. As the world looks to the future, there are a number of emerging trends that carry significant risks and challenges. For example, geopolitical tensions, such as the realignment of regional blocs and the rise of new global powers, can have profound implications on the global political and economic landscape. Climate change, though not only prevalent post-pandemic, is also a major challenge, with the shift towards renewable energy sources intensifying competition between countries for new resources and markets. This, in turn, could lead to a restructuring of the global economy around nations that are major producers and exporters of clean energy technologies. It is thus essential for economic players and policymakers to anticipate future trends and build the necessary foresight to respond to them effectively. This could involve greater integration of foresight into decision-making processes, the development of better foresight methodologies, and the implementation of new tools and training programs.

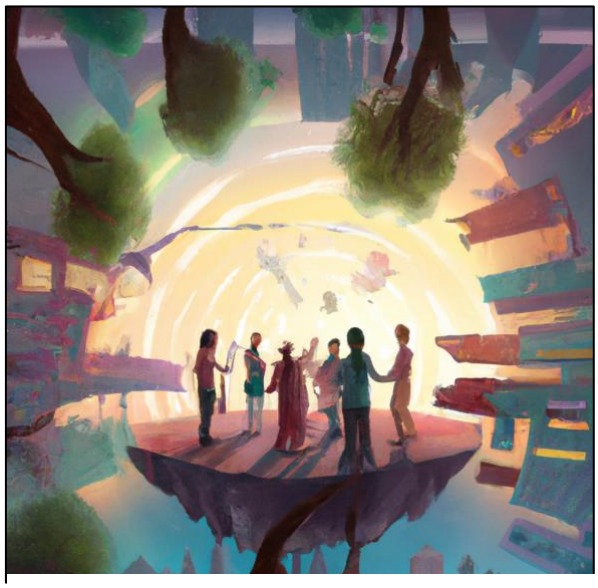
To effectively address all future challenges, a two-fold strategy is required. We should adopt a "local-to-global" mindset at every step, and cultivate a robust foresight culture that includes the participation of all, from citizens to policymakers, to inform decision-making.

How Combining Participatory Democracy and Foresight Practices Can Foster Political Innovation

by Giovanna Giuffrè & Valentina Malcotti

A journey in participatory democracy through challenges (and opportunities) of future-thinking approaches.

What if people from all walks of life were given space to envision the democracy they would choose for themselves? What if political representation went beyond voting rights, encouraging experience-sharing and storytelling to come up with solutions for a better future? This is where the power of foresight comes in handy.



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The belief in foresight's flexibility, reaching beyond its narrow, business-driven trajectory, is a major component of EUARENAS, a Horizon 2020-funded project investigating cities in 4 European countries (Poland, Italy, Hungary, and Estonia) as arenas for strengthening engagement and participation in democracy whilst creating momentum for political change through more inclusive and participatory forms of governance. The project stretches foresight techniques beyond their official settings to involve various actors active within cities, including local politicians, civil servants, NGOs, activists, grassroots communities, citizen power advocacy groups for underrepresented citizens and citizens themselves, with particular attention to marginalized groups.

Hayley Trowbridge is the CEO at People's Voice Media, the UK-based civil society charity leading the foresight work package in the EUARENAS project. In her words, "EUARENAS stretched and 'innovated' foresight techniques and future thinking tools to blend them with participatory and collaborative research methods."

The overarching goal of this approach is to bring citizens and decision-makers together to identify problems (and solutions) concerning shared futures. Foresight approaches can support this aim, nurturing active citizenship in defining social agendas and shaping political life. Foresight can become both a tool for understanding emerging democratic innovations and for engaging citizens and other actors in such innovations.

EUARENAS' foresight 'blend'

EUARENAS' employment of foresight follows three main methodological streams: media discourse analysis (considering traditional media); Community Reporting from scenarios of lived experience (peer-to-peer storytelling), and exploration of signals coming from social media. Results collected from these three methodologies contribute to 'sense-making' on the subject.

Firstly, the project team looked at how media discourse analysis can be used within future thinking frameworks by scanning relevant national and pan-European traditional media (TV, radio or print) products and identifying, within them, the discourses of change happening in society regarding democracy. Items (articles or broadcasts) gathered were shared in a series of local participatory workshops, organized with citizen groups that have the least voice in democracy, to support the identification of the discourses and 'make sense' of signals of change in society about democracy: "What made this go beyond the 'standard' horizon scanning techniques or discourse analysis in the traditional sense", considered Trowbridge, "was that it was framed around involving marginalized citizen groups within sense-making efforts."[2]

2 *EUARENAS' Media Discourse Foresight Guide* is available here

Subsequently, the EUARENAS team tested the lived experience of citizens in thinking about the future via guided peer-to-peer storytelling about their engagement in democracy and decision-making within the cities of Gdansk, Voru and Reggio Emilia. The storytelling set the basis for mapping seeds of change into possible horizons that stimulated conversations about the future[3] using the Three Horizons framework.

The project's third foresight angle, perhaps the most innovative one, looked at social media as a window into current debates, social issues, and trending community topics. Social media accounts, particularly those associated with civil society and social movements showcase what issues and debates matter to people the most and offer a glimpse of emerging trends in the social sphere mediated by collective intelligence. Such content can help to hypothesise about our future, combining signals from social media with future-thinking activities by engaging experts from across policy, practice, research and academia in co-analysing conversations about the future.

The approach[4] was initially devised to examine the topic of 'the future of democracy', but it can easily be adapted to support future-thinking activities on a range of topics, using social media as the core source material.

Challenges and opportunities facing EUARENAS

One of the trickiest challenges identified by Trowbridge is the difficulty in recruiting people, allowing for equitable participation by overcoming barriers preventing people from physically 'taking part', such as work constraints, childcare needs, language barriers, technology competence, etc. Although EUARENAS put in place strategies to overcome these obstacles in its workshops, Trowbridge saves the story of the problematic role of financial participation incentives for another day.

Another big challenge to involving citizens is that dreaming about the future can sound like a privilege to people who are living a bleak present: "When you're not comfortable and don't have a 'good' place within society, the ability to dream and hope for better is hard without it being linked to tangible change," Trowbridge says.

Foresight can become a space in which 'dreaming' is not a privilege of think tanks and researchers. Geoff Mulgan (2020) defined 'social immagination' as, a space in which "communities can, once again, become heroes of their own history"[5]. In this sense, Trowbridge believes foresight has a role to play in achieving social, epistemic and economic justice, also by "enabling people to go beyond 'democracy equals electoral representation' and thrive in true democratic engagement."

Fast-forwarding democracy: weak signals and desiderata

When asked to reach for her crystal ball, Trowbridge has a clear picture in mind: "It's clear that the 'business as usual' attitude won't suffice to face matters such as climate change and planetary health. However, we are reassured by some weak signals for change we have observed from our research in and beyond this project." Above all, people are acknowledging the complex and uncertain times we are living in and there is a shift to increased involvement in civic life.

"To embrace and address this uncertainty" - Trowbridge observes – "we need our services, institutions and policies to be suitable for that adaptable and uncertain environment; this means promoting a more nuanced approach to politics and deliberation…Coming to terms with the shades of grey within consensus building that allow for multiple perspectives in understanding the way(s) forward."

We couldn't leave Trowbridge without asking her our 1-million-dollar foresight question: If things go well, how do you expect democracy and citizen engagement to develop in the next 20 years?

"I would expect us to move away from our current rigid, hierarchical system to a more networked democracy that devolves and disperses decision-making so that decision-making happens closer to whom that decision affects."

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[3] EUARENAS' Lived Experience Foresight Guide is available here

[4] EUARENAS' Social Media Foresight Guide is available here

[5] https://www.ucl.ac.uk/steapp/sites/steapp/files/2020_04_geoff_mulgan_swp.pdf

INTERVIEW

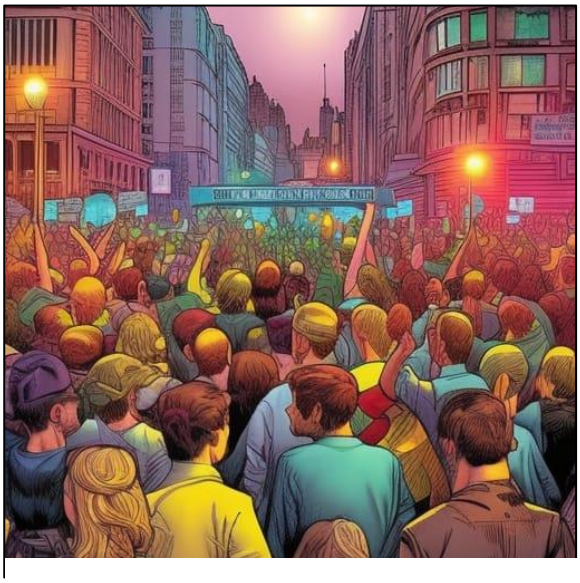
The Changing Face of Public Protest

By Hywel Jones

Street protests are just one aspect of social conflict, but often one of the first that come to mind. Despite the growth of online activism, street demonstrations are as significant as ever.

Professor Jacquelien van Stekelenburg holds a Chair in Social Change and Conflict at the Vrije Universiteit Amsterdam. She is Director of Research of the Department of Sociology and co-chairs the Institute of Societal Research's Polarisation Lab. Her research mainly focuses on protest participation and societal polarisation, such as processes of identity formation in conflicting circumstances.

The Foresight on Demand Newsletter asked for her views on how protest has changed and what the outlooks for the next few decades are.



This image was generated with the help of GPT-3.

How is your research relevant to the future?

The future is always difficult to predict, especially the future of protest. Protests are event driven and fluid, but there are trends, and processes that can explain them.

Social media appears to be very important. It is changing demonstrations qualitatively, from being organised by unions or social movements, as in the past, to becoming more spontaneous and “leaderless”. This makes them harder to predict and poses a challenge in how to police them. It’s hard to make causal claims, but we now see more young people demonstrating for such causes as Fridays for the Future or Black Lives Matter.

I’m also studying social polarisation. There is growing vertical polarisation that is anti-elitist. Citizens are withdrawing from a perceived elite, such as traditional news organisations or government authorities.

Why are social protests increasing?

It depends on the field of scholars you ask: political scientists say that there are more actors using protest as an instrument; if you ask sociologists, they say that more types of citizens are using street protest; social psychologists say that those who participated in protests in the past, might be more likely to protest in the future. And people learn from other successes: “if that worked, why shouldn’t we do the same?”

Since 2020, however, during the COVID-19 pandemic, we saw the rise of a different sort of protest – more radical. The trend is not necessarily becoming more peaceful. The rise in spontaneous protests is perhaps related to social media, which has a “supersizing” effect. For a low cost you can reach larger groups in less time. Now anyone can organise a protest.

Which trends do you see emerging, in terms of topics, formats or demographics?

Based on the data we have, the **number of protests has been growing**. There is a global dataset that covers street protests of three types – anti-government demonstrations, general strikes and riots – from 1900 to 2012. There is a pattern of ebb and flow over time but, from 2009 on, the level has been as high as it was in the 1960s. The types of protest are also changing: In the 1960s there were more riots, but from 2009 on there are more demonstrations – a “normalisation of protest”.

To complement this dataset, we have compiled a Netherlands-only dataset for 2014-22, to see if this trend is continuing. It has exploded. In 2014, there were around 230 applications for demonstrations in Amsterdam. In 2021, this rose to over 1500. And this is not counting spontaneous protests, which have also increased enormously.

How would you expect political and social movements to develop in the next 20 years?

I can speculate on some themes and dynamics. On themes, there has been an increase in "post-material" protests where the perspective is longer-term and international, such as on climate issues, but bread and butter issues have not disappeared. So, we see a combination. We can expect that to continue.

Climate change and related environmental issues – such as nitrogen, farming, land-use and housing problems – also pitch different groups against each other, such as farmers vs Extinction Rebellion. Recently, there were two big demos in Den Haag on the same Sunday. And each referred to the other in their speeches.

In terms of dynamics, we can see movements and counter-movements, increasingly reacting to each other in this way. For example, in the Netherlands anti-Zwarte Piet demos come into conflict with nationalist demos. We can also expect this to continue.

Trust is in decline, whether trust in others or trust in government. Political efficacy is a key indicator. Some people are going to demonstrations to be heard: "they don't listen to me, but I need to be heard". Some protest to state their position or claim, but this is different from going to voice your frustration, it leads to a different atmosphere. There is also a small group of people who believe the politicians of today cannot solve the huge problems we are facing at the moment, such as climate change. And this also creates a different dynamic in a protest.

Looking at the dataset for 2014 to 2020, international solidarity protests are also growing. Not necessarily in turnout but in number of demos. We found 79% of protests in Amsterdam were expressing international solidarity, such as with Butan, Palestine, wars or incidents. Capital cities are the stage for these kinds of protest.

Globalisation and social media create collective identity. And diasporas often feel a sense of urgency if their community is affected. The world is a village and social media strengthens this trend. It is fascinating how fast such demos are organised. During the attempted coup in Turkey a few years ago there were demos in Rotterdam on the same evening. Conflicts from other countries replicate in their diaspora wherever they are.

Looking forward, what major decisions with long-term implications are we faced with at the moment?

Journalists, politicians and police often ask me for advice, and in general I don't have any, but I see two tricky questions for the future:

On the one hand, authorities are there to facilitate a democratic right; on the other, they are responsible for public safety and order. Spontaneous demonstrations make this much more difficult to balance for authorities, so this is a growing dilemma. It's not just the numbers but the way that protests happen. If authorities expect that demos can get out of hand, then they might suggest a different site. In one example in the Netherlands, police went to activists' homes, since there was no central organising organisation. This was then reported in the news, leading to more indignation and mobilisation.

The second question is around depolarisation. If groups oppose each other, how should we depolarise the situation? In polarised situations you put others at a distance, dehumanise and hate them. Depolarising leads to conversation, restoring trust. But how to do that with groups who do not want to listen to authorities, who distrust them fully? Today, even local government is seen as part of the conflict, part of the polarisation, and not seen as an independent broker.

STORIES4EUROPE #OURFUTURES

A Dreamer in Arcadia

By Umar Sheraz

This image was generated with the help of GPT-3.

Nadia yawned as she started poring over her journal and began to think of how to piece together her daily journal. As an anthropologist working on a comparative analysis of food resources and conflict, she had spent the last three months on NANGUN WRUK on an Intergalactic scholarship. She had specifically been chosen as she had been a champion of communal harmony and a believer in change being slow, measured and carefully thought about before being implemented. Her past three months on the planet had been an eye opener to the alternative ways of co-existing and communal harmony and she was wondering how to translate some of these learnings to planet Earth.

In the morning, Nadia had witnessed a community meeting which was summoned because Plearn was stealing rations from somebody else, due to drought. For her, this experience was memorable as there was a calm sense of community togetherness as a resolution to all problems. The matter was resolved amicably with a rationing of resources, without anyone being hungry. But her “Aye Caramba” moment was the sharing of technology between the complainer and the respondent, without any legal hassles. Her mind wandered over to Earth, where she would be resuming her lengthy legal battle over genetically altered legumes and their intellectual property rights. Oh, how she wished that conflicts would be similarly resolved amicably and cheaply, in one meeting?

On the way back from the community meeting, Nadia stopped for a moment to gaze at the small fields of Darshin, an indigenous crop and main staple food of NANGUN WRUK. The philosophy was that less was more and only sow as much as is required. She had envisioned scenarios of zero-wastage of food, but this planet was its living embodiment. Every part of the Darshin crop is utilised, eaten and then recycled as nutrients for the next crop cycle. A vegetarian diet is observed, so water wastage is avoided. Nadia’s idea of in-vitro meat was shunned by the locals as they did not want a divide of ‘haves and have-nots’ in their midst.

As Nadia trekked back towards her residence, she glimpsed at the beeper on her watch indicating her daily calorie intake, fresh air and mandatory outdoor living time and the number of communications she had made with other inhabitants. This health-onomics and lifestyle form the glue which brings the whole planetary community together. Eat well, live well is the mantra. The pursuit of unhampered growth, unabashed profit making, and unethical practices is a distant dream. Nadia wondered what would happen if capitalism found its way to this planet.

As she jotted down her final thoughts to end her report and file it, she started thinking about how to put ideas to practice. To begin with, it was important that this does not just become one more best-case study that gets shelved. Instead, she had started thinking about dissemination, engagement and communication with various relevant and non-relevant stakeholders, including her V-log which had high numbers of followers. Also, it was hard to unremember how communal meetings were used to resolve thorny issues amicably and these techniques could be used to resolve the issues of planet Earth. Finally, the technology for the commons, could be used to remove the differences of the ‘haves and have-nots’ and create an equitable future where nobody had to sleep with a hungry stomach. As she finished the journal, a siren for the mandatory lights-off blared across the premises. Six hours of rest was mandatory for healthy and positive living and perhaps that was another lesson to be learnt and logged.

This story was originally published in the collection ‘Stories from 2050’. You can read this and other stories here.

FROM THE FUTURES4EUROPE PLATFORM: SELECTED CONTENT

S&T&I for 2050: deep-sea mining and ecosystem performance

By Susanna Bottaro

There are an estimated billions of tonnes of strategic minerals such as nickel, cobalt and copper, lying on the ocean's floor. Technological advance, financial viability, and regulatory frameworks are slowly aligning to permit deep-sea mining (DSM). While many rejoice in these developments, a variety of actors are calling for a moratorium on the nascent industry. The European Commission released a Joint Communication stating that not enough knowledge about the risks of DSM is available and that more research is to be conducted to make DSM sustainable. With deep-sea mining closer than ever to becoming a reality on the one hand, and calls for a moratorium on the other hand, it is important to discuss future directions of Science, Technology and Innovation (STI) for a flourishing deep-sea ecosystem.

The way in which we view the world and how we conceptualise nature shape our attitude towards it and the type of STI to be desired and pursued. The project "S&T&I for 2050" provides a framework to imagine different sustainable futures depending on underlying values and human-nature relations. Three perspectives on ecosystem performance are described:

1. "Protecting and restoring ecosystems", concerned with preservation of ecosystems by managing the impact from human activities.
2. "Co-shaping socio-ecological systems", concerned with simultaneous development of social practices and ecological processes towards resilience and sustainability renewal.
3. "Caring within hybrid collectives", concerned with the establishment of caring relationships in new local collectives with humans and other entities on an equal footing.

These three perspectives offer different views on notions of the deep sea and how and why we should promote its flourishing, and therefore delineate different views on deep-sea mining.

Read more here.

Socioeconomic and socio-political scenarios shaping the European Hydrogen Economy of 2040

By Ulli Lorenz

What could a European energy system that includes hydrogen look like in 2040 in the context of different global, political, economic and social constellations in and around the continent?

This is the central question in our scenario process with our expert group and guests. In the current phase, we are developing the socioeconomic/-political scenarios that will significantly impact what a European energy system based on abundant hydrogen could look like. In a series of interviews at the beginning of the scenario process, we identified the following six key factors: (1) Global Power Constellations; (2) European Integration and Cohesion; (3) The Degree of Autonomy and Self-Sufficiency in Europe; (4) The Focus of European and Global Policy; (5) The Values, Preferences, and Sustainability of Lifestyles; and (6) the Organisation of Energy Systems.

Read more here.

These blog posts were originally published on the Futures4Europe platform. You can find these and other posts here.

JOIN OUR HORIZON FUTURES WATCH WORKSHOPS, ONLINE!

The evolving complexity of global challenges is increasingly affecting the steering of European Research and Innovation which aims at addressing important present and future societal concerns. The idea of 'watching futures' to anticipate future possibilities and analyse the consequences of current choices to inform and shape a forward-looking EU R&I policy is continuously gaining ground.

In this light, as part of the 'European R&I foresight and public engagement for Horizon Europe' study launched by the European Commission in connection to the Horizon Europe Foresight Network, a series of **online workshops** will take place during the Spring and early Summer of 2023.

These workshops, which will run for two hours each, will discuss insights stemming from thematic policy briefs compiled by expert panels, addressing possible future scenarios for critical issues (i.e., social confrontations, use and management of land and sea, science for policy, etc.). Each workshop will feature experts from the panels who developed the policy brief, guest speakers from relevant EU R&I projects and policy-makers, and will involve extensive engagement with the participants.

REGISTER NOW - Free registration for the first 3 workshops is open: **https://bit.ly/409UuwY**

- Workshop #1 - **Futures of social confrontations: challenges for EU policy**
  Root causes and structural conditions of social confrontations (ideological divisions, discrimination, inequalities in access to resources, environmental issues, etc.) both online and offline.
  31 May 2023, 11:00-13:00 CEST

- Workshop #2 - **Futures of using nature: policy implications for land and sea management**
  Stewardship of land and sea, including access and usage rights in rural regions, use of land and sea space, preservation of biodiversity, and sourcing of energy and raw materials.
  14 June 2023, 11:00-13:00 CEST

- Workshop #3 - **Futures of science for policy: producing evidence-informed policy**
  Trends that are likely to shape the ecosystem of science advice to policy in Europe in the future and their impacts
  28 June 2023, 11:00-13:00 CEST

Futures4Europe: SAVE THE DATE: RELAUNCH EVENT ON MAY 24

Futures4Europe is pleased to announce the relaunch of its foresight platform. Focussed on bringing together foresight practitioners, policymakers, and citizens to contribute to discussions about the future, Futures4Europe brings together members of the futures and foresight communities with EU policymakers and citizens. It aims to collect, host, and disseminate foresight activities in and about Europe. It is part of the HE-FE project - European R&I foresight and public engagement for Horizon Europe.

Our relaunch event on 24 May will provide insight into the exciting new features and resources available on the platform. We invite you to join us and **explore how Futures4Europe can support you in building your futures knowledge and skills**.

To keep informed about the relaunch event, follow us on LinkedIn or Twitter and sign up for email updates. **Add the event to your calendar and help us spread the word**. This **100% digital event** is accessible from anywhere, and we can't wait to see you there.

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