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Protect, prepare and transform Europe

Recovery and resilience post COVID-19

ESIR
Policy Brief No.1

Independent
Expert
Report

Protect, prepare and transform Europe: Recovery and resilience post COVID-19

ESIR Policy Brief No. 1

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Protect, prepare and transform Europe

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PROTECT, PREPARE AND TRANSFORM EUROPE: RECOVERY AND RESILIENCE POST COVID-19

Our planet is facing a deep systems crisis, rooted in a number of strongly interconnected global challenges such as climate change, biodiversity loss, pollution, widespread poverty, inequality and growing instability.

The convergence of our environmental and health crises is the greatest existential threat facing humanity today. It is also the reason why our 21st century “moon-shot” must be to focus our collective efforts and investment on living within our planetary boundaries,¹ safeguarding citizens from environment-related pressures and risks to health and wellbeing.²

As we move to economic reconstruction in the wake of COVID-19, our choices and the impact of our investments through recovery packages as well as research and innovation (R&I) will make or break our future. COVID-19 cannot be acted upon as a singular threat, but as one extreme event within a crisis continuum, which poses long-term risks to human health and livelihoods, economic prosperity and planetary stability.

In effect, not only is this crisis continuum predicted to create perpetual economic strain, the future value of all assets under management (pensions, taxes, public infrastructure, natural resources) is also now at risk from the converging effects of the climate emergency, health pandemics, and economic collapse. Such losses can be managed only through collective and systemic action, driven by “value”-based decision making long before they become full-blown crises.

This could be framed as an imperative to direct a percentage of all such assets towards an investment in R&I that is in service of the future stability of “people, planet and prosperity” – a form of insurance to secure a smoother transition towards a more stable, inclusive and regenerative paradigm. This requires carefully designed systems transitions, in which both research and innovation – the latter, in the broadest sense – must play a key role in addressing societal challenges.

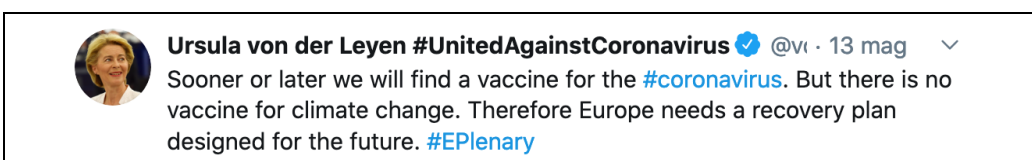
The systemic nature of the transformation that is needed bears important consequences for public policy: if governments address each new crisis as it arises, with the same growth narrative and perverse incentives that got us here, we will exceed the capacity of public institutions, crisis managers and society at large to cope, jeopardizing our capacity to protect and enhance quality of life.

¹ Planetary boundaries can be powerfully illustrated by Kate Raworth’s doughnut: <https://www.kateraworth.com/doughnut/>.

² 7th Environment Action Programme objective: <https://ec.europa.eu/environment/action-programme>.

This is even truer for the European Union, given the complexity of its multi-level governance: the ability of institutions to protect citizens, the economy and the environment and to prepare for future crises and shocks calls for a deep transformative effort, which involves all levels of government as well as the private sector.

The European Commission seems increasingly aware of the need for forward-looking solutions, rather than quick fixes to outstanding emergencies (see example box below). And it is aware that there is no turning back to the *status quo ante*, which was already far from sustainable in the long term. Citizens in many EU countries are in agreement. Going back to pre-COVID-19 models of growth is not an option - greater focus should be placed on valuing “sufficiency” and “essential job” creation.³



Creating **greater resilience by design, not by disaster** should be at the core of a coordinated EU recovery response to the COVID-19 outbreak.⁴ In the midst of a global health emergency and imminent economic recession, an integrated “people, planet and prosperity” recovery model and a concerted investment in research and innovation-led transformation will enable us to emerge from this pandemic more resilient as a region, as countries and as localities.

Key to this are core tenets of liberal democracy – freedom, choice, collective responsibility for the respect of rights – and acknowledgement of the critical importance of meaningful work for every citizen in order to build emotional and social resilience and wellbeing. Europe has world-leading examples of collaborative governance, cooperative industries, top class science and innovation and competitiveness achieved through solidarity. COVID-19 recovery policies would do well to draw upon them to provide guidelines and lessons learned for others.

It is therefore imperative that the post-COVID-19 stimulus programme and the European Green Deal are addressed as one single and systemic investment programme with clear enabling conditions fostering jobs, especially green jobs, new capabilities and well-being for all across society. This will also be a unique opportunity for the EU and its Member States to strengthen their policy coherence towards resilience and sustainability.

³ See survey presented at: <https://news.sky.com/story/coronavirus-only-9-of-britons-want-life-to-return-to-normal-once-lockdown-is-over-11974459>.

⁴ For an overview of the European Commission’s response to the Covid-19 crisis: https://ec.europa.eu/info/live-work-travel-eu/health/coronavirus-response/overview-commissions-response_en.

The need to address humanity's vulnerability to systemic risks such as health pandemics, environmental crises and widespread cyberattacks must drive a research and innovation framework founded on the fundamental principles of collaboration, solidarity and accelerated learning for the benefit of all European citizens, countries and generations. European R&I policies and programmes should thus be designed to enhance the lives and livelihoods of people and enable resilience across European and global communities.

This is a question of direction (i.e. R&I should address concrete societal challenges with systemic approaches) and of speed and responsiveness. The EU should encourage and promote new forms of innovation and investment directed towards applied research and demonstration, rapid learning and reflection including greater citizen engagement, so as to translate outcomes into impact with immediate, mid- and long-term resilience.

This health pandemic shows us that quick transformational change is possible, but changing overnight also bears risks. Citizens have completely changed their daily lives; governments had to become more flexible, nimble and systemic to protect the health and livelihoods of their citizens; companies have been asked to prioritise safety and well-being above profits, whilst their value chains are being turned upside down.

These are at once examples of the shift we managed to achieve over a few months, as well as lessons we can build from to build back better, knowing that the road ahead will require even deeper transformation, and the need to leave no one behind.

Importantly, the COVID-19 crisis should not make Europe look inward: a “people, planet and prosperity” oriented R&I policy at the European level must be properly communicated globally and translated into collaboration and knowledge exchange at the international level. Europe should take this opportunity to rise to the challenge of shaping a more sustainable and constructive global risk governance and promote more resilient transformative economic models. “Follow the science”, optimise technology and upgrade digital infrastructure is the mantra of all governments who successfully contained this epidemic in their respective countries.

We must ensure that, together with the scientific and expert community, we direct investment towards **enhanced protection** from the adverse impacts of social, economic and environmental shocks; **better preparation** to face emerging large-scale risks; and **deep transformation** to be able to reconcile sustainability with resilience in the future.

This “protect-prepare-transform” approach ultimately implies optimising innovation in an integrated fashion, focusing on a transition which is just and embodies new social, green, and digital pathways altogether. Europe, with its collaborative and inclusive approach to innovation, is well equipped to respond to this emergency, but will have to do it in a coherent and ambitious way.

Below, the ESIR experts offer *15 recommendations* to this end.

ESIR RECOMMENDATIONS for a Green, Equitable and Future Proof COVID-19 Recovery

“Economic and Societal Impact of Research and Innovation” (ESIR) is a new European Commission Expert Group bringing together 15 European experts working on the links of R&I policy to the global and European social, economic, environmental and digital transformation.

The key Research and Innovation (R&I) recommendations in this report reflect ESIR’s view that the COVID-19 fiscal stimulus should be combined with the European Green Deal package and public policy across the board to craft an equitable, secure and sustainable system, fit for purpose in a digital age, to ensure that the Europe and its governments are better protected, more prepared and deeply transformed, to respond to the citizens’ needs and aspirations.

INTERNALISE LESSONS AND RISKS

1. **Take stock of the COVID 19 crisis to help the EU “rewrite the future” through improved understanding of the responses to the crisis.** Learn from new solidarities and community-building responses, identify successful innovative solutions and underpin ongoing transitions by bridging evidence-based and foresight-based research together in a broad, multi-disciplinary effort to map, analyse and redesign social, environmental and economic systems.
2. **Draw lessons from the policy responses of local and national governments** and operationalise them into short- and long-term R&I actions. Governments that managed the crisis by focusing on well-being, adopting new sustainability-oriented economic models and green and social recovery plans provide valuable lessons that must be analysed and scaled up. This requires a deep reflection that goes beyond the existing examples at EU level with Horizon’s “R&I Missions”, partnerships and programmes, to encompass the role of governments as catalysts of transformational change.
3. **Step up horizon-scanning and foresight** and consider setting up a centre for the anticipation of large-scale risks to ensure robust risk assessment and management. This requires a large-scale effort in collecting and processing various sources of data and intelligence; and a multi-disciplinary approach, aimed at identifying various sources of risk, either stand-alone (e.g. health, bioterrorism, climate, cybersecurity) or combined (e.g. multi-vector threats).
4. **Better develop targeted R&I solutions for crisis situations through a “European Crisis Map”.** A European monitoring and humanitarian response tool to ensure early help for those most affected by crises, mapping regional risk zones, could be established. This requires a comprehensive approach in the study of territorial vulnerabilities and in enhancing emergency preparedness at all levels of government, as well as in civil society.

5. **Develop rapid response capabilities to organise and distribute public data in emergency situations.** Propose a well endowed plan to revamp Europe's public data integration, distribution, and visualization infrastructure. Efforts should focus on distributing public data (aggregates), not personal or private data. Promote privacy-enhancing, decentralised, rights preserving technologies that can tackle societal challenges, while protecting people's digital rights.

INVEST FOR THE FUTURE

6. **Promote coherent, resilience-enhancing investments at all levels of government** through more coordinated European and national R&I actions, including Horizon Europe and national R&I funds; coordinated reforms through the European Semester; the Multiannual Financial Framework, the European Investment Bank and national investment promotion institutes; and the EU sustainable finance strategy, including the sustainable finance taxonomy, as well as green and social bond standards. Use the opportunity of the future Recovery Fund to promote resilience- and sustainability-oriented reforms as conditions for economic support to suffering national economies and firms, building the needed scope and breadth through more positive fiscal stances.
7. **Protecting jobs should not equate to bailing out companies without conditions.** In order to build in resilience in our current economic system whilst establishing a more equitable economy, environmental and social conditions must lay the framework for fiscal stimulus, economic recovery and R&I. This will ensure long term employment for European citizens whilst implementing our climate neutrality and European Green Deal objectives at the same time.
8. **Increase public R&I investments within the EU and Member States' budgets as a crucial response to the crisis⁵.** This will require proactive interventions to protect and augment budgets, under pressure from a sense of "force majeure". EU and national R&I programmes should be reinforced and increasingly coordinated around a common vision of the R&I needs of the future European society, away from fragmented or incoherent multi-level approaches.
9. **Direct public and private resources to finance systems innovation** through a commitment between the EU's various funding instruments and the private investment community on phase 2 of the Sustainable Finance action plan. Provide an institutional signal of support and encouragement for institutions and investors to invest in R&I as a hedge against systemic and strategic risk associated with a

⁵ Even before the crisis, Europe was not on track to achieve its own target of dedicating 3% of its GDP for R&D. According to Eurostat, R&D intensity reached 2.06% in 2017, with only 4 member states (Austria, Denmark, Sweden and Germany) managing to reach the 3% target. Much of that increase was due to private expenditures, which account for 66%. There is a however high risk that R&D budgets in the private sector stagnate or even decrease. Within this context, it will be crucial for public research budgets, both at the EU and MS level, to play the role of stabilizer.

continuum of crises and the imperative of transformation. More sustainable, social and green private R&I investments should not decline in recessionary contexts.

10. **Pursue reforms to safeguard knowledge-intensive companies.** Strengthen the industrial base; stimulate short and long term new sustainable jobs, e.g. digital, circular economy, urban and rural rewilding and preventive health services. Invest in short term post COVID-19 job creation; R&I and technology infrastructures, and in capabilities and mindsets for greater resilience and transformation e.g. low carbon energy and mobility, digitalisation and technology access, health including: public infrastructure for mobility, retrofitting public buildings, public procurement based on more circular economic principles and local/resilient/supply chains.

INNOVATE WITH and FOR THE PEOPLE

11. **In partnership with citizens, the European Commission should initiate the co-creation of a common 2050 sustainability vision** focusing on social and environmental pillars (enabling SDGs) through innovative digital methods for mass engagement as part of the conference on the Future of Europe and Climate Pact.
12. **Ensure that citizen engagement and social dialogue through R&I addresses citizens' calls and protests for more collaborative and participatory governance structures**, enhancement of rights protection, relaxation of fiscal constraints, reduction of inequality, and ensuring the transition to greener and more sustainable energy sources. This should include an explicit focus on applied social innovation, governance innovation and community mobilisation in R&I priorities and enabling structures (e.g. European Commission "R&I Days").
13. **Implement Horizon Europe in a way that facilitates on-the-ground experimentation**, R&I project portfolio management and exploitation of results, and increased participation of civil society in R&I. ESIR recommends to take into account these proposals when finalising the Model Grant Agreement and first work programme of the Horizon Europe.
14. **Optimise digitalisation and AI for people.** This entails mobilizing "data for the public interest" through the creation of cross-cutting public data spaces at all levels of government, mandatory interoperability requirements on important datasets in the hands of private companies as well as harnessing digital working practices as an opportunity for more inclusive work environments for people with disabilities, care-giving responsibilities and other special needs.
15. **Foster resilient cities and rural communities through new models of safety nets and creative procurement policies** (including efficient pro-innovation procedures, pre-commercial procurement, and quotas for SMEs participation), the promotion of digital entrepreneurship and empowering local communities to make the most of the data economy as well as by funding grassroots innovation communities as a space to learn new skills, test new models and support solidarity.

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ESIR is a high-level expert group that provides evidence-based policy advice to the European Commission on how to develop a forward-looking and transformative research and innovation policy. This will help drive Europe's transition to full sustainability.

In this publication, the ESIR group provides advice on a powerful transformative European research and innovation policy in support of the Covid-19 crisis recovery. The group's recommendations explore how to prepare and transform our economic and societal systems to become more resilient to future crises.

Research and Innovation policy

