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Authors

Christiny Miller, William Davies, Jonathan Barth, Jakob Hafele, Elizabeth Dirth, Lydia Korinek, Nina Schulze, Nora Kögel, Emmet Kiberd

Editors

Christiny Miller

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Executive Summary

The COVID-19 pandemic and the shockwaves it caused around the world have exposed vulnerabilities and weaknesses of our current systems to protect people and planet. The response to the pandemic has been unprecedented and the recovery process offers an opportunity to build a resilient economy and a sustainable future. Within the EU context, Member States developed national recovery programmes to not only tackle the short-term challenges of the pandemic, but also implement policies, measures and reforms which address today's longer-term and broader challenges.

Against this backdrop, to help policymakers assess whether their policies create the systemic change needed from the recovery process, ZOE Institute and New Economics Foundation developed the Recovery Index for Transformative Change (RITC). The framework for this index includes indicators which assess whether policies contribute positively or negatively to a just transition, the protection of nature and systemic change, as well as a scale taking a holistic view of groups of policies and considers whether these policies are coherent with one another.

ZOE Institute and New Economics Foundation applied this framework to the National Recovery and Resilience Plans of thirteen EU Member States to assess the strengths and weaknesses of these plans with regard to their transformative potential. In undertaking this exercise, the framework, processes and assignment of values to qualitative indicators were all refined. Crucially, in the RITC, we developed a framework which includes analysis of underlying structures that cause adverse outcomes in policy analysis: in other words, the systemic dimension. This process facilitated a reflection on the applicability of this methodology to other contexts, but also on how to advance the practice of assessing and understanding systemic change.

This policy brief gives a detailed explanation of the methodology behind the RITC and its application with regard to the National Recovery and Resilience Plans. Our hope is that this can be a step forward in the assessibility of systemic change, a practice important to incorporating systemic change into policymaking.



Introduction

"The European Green Deal and the NextGenerationEU Recovery and Resilience Facility will shape the social, economic, and ecological architecture of the continent for decades to come. To use their potential to the fullest and to build the Europe we all want to live in, we must adopt a systemic approach."

- Ursula von der Leyen, President of the European Commissionⁱ

As the European Union (EU) begins the process of recovering from the public health and economic crises caused by the Covid-19 pandemic, many policymakers, stakeholders and citizens are realising that we do not just face an isolated public health crisis or economic shock, but a number of interlinked, deeply-rooted and interconnected challenges. The current system of rising social inequality and polarisation, depletion of natural resources, overshooting of planetary boundaries, destruction of natural habitats and biodiversity all pose a great threat to the wellbeing of humans, our societies and the environment we live in. While excacerbated by the pandemic, ecological, economic and social challenges did not begin in 2020, nor are they separable. For example, the recent Dasgupta review, commissioned by the UK's economic and finance ministry, has highlighted the accelerating biodiversity loss due to anthropogenic drivers such as land use and climate change. In addition, social inequality has worsened, leaving low-income earners more vulnerable to both economic shocks and health impacts of the pandemic. Dealing with the scale and complexity of these challenges requires an approach to solutions with ambition, depth of change, and width of reach. In other words, and as von der Leyen puts it: a systemic approach.

It is against this backdrop that ZOE Institute for Future-fit Economies and the New Economics Foundation (NEF) developed the Recovery Index for Transformative Change (RITC) as a tool to evaluate policies for their transformative potential to deliver systemic change. This framework enables a critical assessment of governments' efforts to generate systemic change in the context of the recovery from the pandemic, as well as in other policy programmes.

This assessment framework was developed to assess thirteen National Recovery and Resilience Plans (NRRPs) from EU Member States applying for funds from the Recovery and Resilience Facility (RRF), the EU's mechanism to foster recovery in the aftermath of the Covid-19 pandemic. The <u>full assessment report</u> as well as <u>individual country profiles</u> are available online. This brief outlines the framework's methodology in greater detail to extend its application within and beyond the RRF. In the following pages, we will first elaborate on the rationale behind developing such a framework. Second, the methodological framework is outlined and presented for general application. Third, we will draw on insights from the assessments of NRRPs as an exemplary case study of the application of the framework. In this brief we explore the ways in which this new assessment framework can be used to understand and measure how and to what extent policies deliver systemic change.

Context

What is Systemic Change?

Systemic change in the broadest sense addresses the foundations of a system, in order to alter the deeply-rooted ways of living, of producing, of working and of interacting^{iv}. It necessitates taking a holistic, cross-cutting approach to change by simultaneously directing the behaviour of policy, citizens, business and finance on sustainability and resilience. It not only addresses symptoms of an economy that harms both the environment and the wellbeing of people, but the root causes. As such, "systemic change can be understood as changing the formal and explicit (policies, practices, resource flows) as well as informal and semi-implicit (power dynamics, relationships and connections) and implicit (mental models) institutions of today's economies"^v. It should have a long-term transformative vision with an overarching goal to transform how a society is organised and functioning in all its interconnected aspects.



SYSTEMIC CHANGE

can be understood as changing the formal and explicit, informal and semi-implicit, and implicit institutions of today's economies. Times of crises, rupture or disruption, such as those experienced during a pandemic, can disrupt the status quo and expose the flaws of the current system, offerering essential moments for large-scale changevivii. The shock of a crisis can present a window of opportunity for policymakers to take bold courses of action and unfold policies' transformative potentialviii.

The RITC was developed in the context of responding to the moment of transformative potential that the recovery from the pandemic offers, however its relevance goes beyond application to such moments of distruption.

Use Case: Covid-19 Response

The shock of the Covid-19 pandemic offered one such unique window of opportunity for systemic change. The pandemic has exposed the vulnerabilities of our socioeconomic systems. In response to the crisis, governments took both short-term measures to limit the health impact of the pandemic as well as medium-term measures to ensure economic stability and eventually, recovery. The EU installed the RRF to finance the recovery processes in Member States and to create a system more resilient to future shocks. The RRF also aligned with the EU's mission to attain climate neutrality by 2050 and to foster sustainable development. The RRF promotes a digital and green transition and actions for resilient communities and economies as elaborated below. In order to receive funds from the RFF, EU Member States had to submit recovery and resilience plans that laid out intended reforms and investments to the European Commission.

At time of publishing, these plans have been assessed by the European Commission for whether they met criteria of the RRF guidance^{ix} and complied with the Do No Significant Harm (DNSH) principle^x. Our evaluation using the RITC goes beyond what was assessed in this process to understand how these plans took advantage of the window of transformative potential that the pandemic created¹. The RITC, in turn, takes a holistic view towards systemic change, which recognises the interconnected nature of our socioeconomic systems and the natural world. It pays attention to social and ecological potentials and risks of policies and their interaction.

The assessment framework of the RITC works to operationalise the concept of systemic change. It is not only a tool for analysing plans, but can also be used to track progress in implementing systemic change. In <u>an initial report</u>, this methodology has been applied to the national plans submitted to the RRF, although its application is not restricted towards this instrument. To support the use of the RITC beyond the context of the NRRPs, this brief elaborates on the approach in general terms, while using the case of RRF assessment as a demonstration of its application.

<u>Methodology</u>

Overview

The RITC assesses the extent to which policies deliver transformative change both of single policies and the policy package as a whole:

¹ A number of organisations conducted in-depth area-specific analyses. For example, Vivid Economics recently assessed the greenness of the planned recovery processes in several Member States, which captured the present shortcomings with regards to nature-based solutions, climate- and nature-positive investments and practices. Similarly, the Green Recovery Tracker examines the effects of measures on climate change mitigation and the green transition. The reports provide essential in-depth analyses of the NRRPs in their respective foci that can inform and complement not only the Commission's own assessment, but also any systemic analysis.



- 1. Single policies: the RITC assesses how systemic single measures are. In doing so, the RITC firstly measures the width of change by assessing the cross-cutting reach of a policy measure to address environmental ("natural world") and social ("just transition") issues. Second, the RITC measures the depth of change which refers to a policy's ability to address underlying root causes of a problem rather than a surface-level attempt to address only a recent symptom.
- 2. **Policy package**²: As the assessment of single policies says little about the overall impact, the third level looks at the set of policies all together. In addition, the RITC assesses how many of the necessary changes needed for a systemic transformation are covered and whether measures only target a single actor or all important economic actors together (policy, citizens, finance and business) to ensure there is coherence across policy objectives, for example with multidimensional indicators or mechanisms to take a long-term view.

More specifically, the *width of change* looks at how different objectives are simultaneously accomplished by policy measures, to ensure a measure is cross-cutting. In order to evaluate the width of a policy measure, the RITC assesses the policy against two main questions: does the policy measure lead to long-term impact in (i) advancing the goal of achieving a just transition, and (ii) lowering environmental risks and making a positive contribution to the preservation of the natural world. This duality in the approach is necessary to balance social and environmental goals.

The second aspect is the *depth of change* that is required to create systemic change. Systemic policies focus on root causes of problems – the underlying structures and mechanisms – instead of simply reacting to the symptoms. This is also emphasised by the Club of Rome's System Change Compass Report^{xi}. Furthermore, a systemic approach to policy evaluation requires cutting across different stakeholders and sectors. Only in that way can current path dependencies be revealed and dismantled, e.g., societal value system or carbon-intensive infrastructure.

Third, systemic policies focus on *how policies interact with the status quo to orchestrate an array of changes* rather than just the behaviour of one actor or institution. This can relate to how policies either make it easier to abolish damaging economic and social practices (e.g. fossil-based technologies) or mainstream less harmful economic and social practices (e.g. innovations, business models, consumption patterns), or both^{xii}. It can relate to the nuance of "how" systemic change happens^{xiii}. Systemic change is not just about specific policies or solutions but it is also about how they are implemented, designed, what underlying mental models, practices, etc. they tackle, and how they direct a series of changes, not just the behaviour of one group. It can also relate to the level of ambition of a policy. This aspect was heavily informed by the systemic intervention areas outlined in the *Building a Resilient Economy* report^{xiv}.

Together, ZOE Institute and the New Economics Foundation constructed a set of criteria that allow researchers to evaluate the potential for systemic change of policies. Initially, this index was developed to assess NRRPs submitted by EU Member States to the European Commission as part of the RRF (see <u>Application of Methodology</u> for further explanation of this application of the Index). However, this framework for assessing systemic change can also be applied in other contexts. The index is a helpful tool to highlight the objectives and institutional changes necessary to move towards a sustainable and resilient economy that are not covered by policies or policy packages.

Assessment Framework of the RITC

The RITC is designed to provide a structure for assessing the systemic change potential in policy measures. With this method, information on the performance of policy packages can be easily collated into one datasheet, which facilitates the analysis and transparently presents the reasoning for scoring. The framework is designed so that a scoring system will provide indicative sense of the objectives

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² In the example of the NRRPs, a policy package is the "component" of the plan.

addressed, highlighting strengths and weaknesses of the policy package, while still having the scope to provide more qualitative detail on specific aspects.

Width of change

To measure the width of transformative change, the RITC assesses how policies address the social dimensions of a *just transition* with five indicators and the protection and enhancement of the *natural world* with four indicators. While this is not a definitive list of the indicators which could contribute to a just transition and a protected natural world, these nine indicators were chosen as they best capture key aspects of these two dimensions. Against these indicators, we assess the extent to which elements of the policies assessed have *strong potential* to positively impact these indicators and *strong risk* of negatively impacting these indicators.

The indicators for width of change and their definitions are as follows:

Table 1: Definitions and assesment criteria for indicators to assess the width of change

Just transition	
Social protection for workers & communities most affected by transition	Social protection policies help people manage social risks to prevent poverty and maintain decent living standards, like benefits or social assistance. When transitioning to a low-carbon society, social protection should protect and adapt jobs and income sources to new conditions and focus on the whole community, not direct beneficiaries. These policies should support a vital "social infrastructure"; a range of public services and facilities that meet local needs and enable a good quality of life (e.g., education).
Resilient local economy	Decarbonisation plans should create resilient local economies by being locally specific, creating economic diversity (i.e., not over-reliant on a sector), meeting local needs and providing community stability. There should be a focus on foundational economy, essential networks (utilities, food supply, transport) and services (education, health, social care, public administration) that daily economic activity relies on.
Jobs for a resilient economy	Jobs created by the transition must be of good quality, green and important for resilient societies. Jobs involved in the green transition, working with nature, the care sector, healthcare, culture, community services and education would all be included. Good jobs create positive impacts on employees through terms of employment; pay and benefits; health, safety and psychosocial wellbeing; social support and cohesion; work-life balance; and worker voice and representation.
Social dialogue and civic engagement	A just transition must give citizens a say in the decisions that affect their lives and communities, especially those who have been historically marginalised, allowing people to participate in civil society. This includes the spectrum of open and honest communication and consultation between a range of stakeholders involved in change, formal processes of negotiation, consultation and information exchange in policy creation and participatory methods. Strengthening partnerships with organisations embedded in communities is critical.
Diversity and inclusion	Equity, by recognising and addressing the power imbalances resulting from historical legacies and ongoing impacts of structural inequalities (e.g., racism, sexism, ableism) and the creation of disparate outcomes, helps deliver justice. Different structural barriers and opportunities must be understood and tackled when developing and implementing policies and programmes. Increasing diversity and inclusion is imperative for achieving equity in society.
Natural world	
Biodiversity conservation	Biodiversity is typically defined as the abundance and diversity of different species of flora and fauna in a given place. It has both ecological and social value and its preservation and promotion is fundamental for a low-carbon society.
Nature-based solutions	Nature-based solutions are "actions to protect, sustainably manage and restore natural or modified ecosystems that address societal challenges effectively and adaptively, simultaneously providing human wellbeing and biodiversity benefits" **. These solutions relate to natural, semi-natural, novel, and urban ecosystems and should seek to be self-sustaining. They may have both ecological and social objectives (e.g., restoring natural beauty or flood mitigation).



Connecting people with nature	A greater connection between people and the natural world results in benefits to the individual, like increased happiness and wellbeing, and society, such as greater awareness of environmental challenges and embedding of pro-environmental behaviours. Policies in this area should remedy poor individual behaviours and social habits towards nature (e.g., polluting actions).
Climate change action	Responses to climate change may take the form of mitigation measures (aimed primarily at reducing the emissions of greenhouse gases that are driving climate change) and adaptation measures (by which societies reduce their vulnerability to the effects of climate change.

For each of the nine indicators under the width of change, each policy measure or group of measures³ (policy package) is scored first for whether it contributes positively to an indicator and then for the potential risks it entails. A measure is scored with a '1' if it has strong potential to contribute positively to that indicator, '0' if it does not show strong potential to contribute positively. A score of '0' was used in the case of either having a rather low positive, very indirect positive or no effect as well as if it is not possible to assess the effect. In a second column, a measure is scored '-1' if it contains a strong risk to lead to negative impacts on the indicator or '0' if the risk is low or negligible or not possible to asses. Then the total potential score is summed with the risk score for a final score for just transition and a final score for natural world. See the examples in Table 2 and Table 4 for a demonstration of how this scoring worked. A three-point scale was deemed appropriate for the scale, scope and depth of the NRRP assessment, however it is possible for a more granular analysis to adapt the scale to include additional levels to differentiate levels of positive and of negative effect.

Table 2: Example of a width of change assessment

	Natural World						
Policy Measure	Indicator	Score 1 = Strong Potential 0 = Not Strong Potential	Potential Score	Indicator	Score -1 = Strong Risk 0 = Not Strong Risk	Risk Score	Natural World Score
Policy Measure #1	Biodiversity conservation	0	2 sum of 4 indicator scores	Biodiversity conservation	0	-1 sum of 4 indicator scores	
	Nature-based solutions	1		Nature-based solutions	0		1 sum of potential and risk scores
	Connecting people with Nature	0		Connecting people with Nature	0		
	Climate change action	1		Climate change action	-1		

Depth of change

The depth of change refers to a policy measure's ability to address the root causes of current environmental and social crises. The criteria, built around concepts developed in *The Water of Systems Change* and the *Analysing Options for Systemic Change to Transform the World's Economic and Financial Systems* reports, outline a spectrum of change from the *explicit change*, which changes the current dynamics through policies, practices and resource flows; to *semi-explicit* change, which changes relations through forging new connections and toppling hierarchical power dynamics; to *implicit change*, which changes the narratives through the mental models that exist in society.

The indicators for depth of change and their definitions are as follows:

Table 3: Depth of change indicators

Explicit Change (changing dynamics)		Example per type of change	
Policies	Formal legal, institutional and organisational rules, regulations, and priorities that guide the actor's own and others' actions.	Changing regulation about mobility modes allowed in urban spaces.	

³ For the application of the RITC to the NRRPs, the assessment was applied to the component level of the plans rather than to each individual policy measure. It could also be used at the individual policy level.



Practices	Espoused activities of institutions, coalitions, networks, and other entities targeted to improving social and environmental progress. Also, within the entity, the procedures, guidelines, or informal shared habits that comprise their work.	Introduction of new procurement processes that mainstream the waste heirarchy.	
Resource flows	How money, skills, knowledge, information, energy and material resources and other assets such as infrastructure are allocated and distributed among economic actors.	Financial support for low income groups from home energy efficiency renovations.	
Semi-explicit C	hange (changing relations)		
Relationships & connections	Quality and quantitiy of connections and communication occurring among different actors in the system, especially towards those with limited access to influencing policy and those with differing histories and viewpoints.	Stakeholder (especially worker and union) inclusion in designing the transition process of an industry.	
Power Dynamics	The distribution of decision-making power, authority, and both formal and informal influence among individuals and organisations.	Stakeholder inclusion in infrastructure planning processes and decisionmaking.	
Implicit Change	e (changing narratives)		
Mental models	Habits of thought—deeply held beliefs and assumptions and taken-for-granted ways of operating that influence how we think, what we do, and how we talk.	New policy is measured in wellbeing outcomes.	

For scoring the depth of change, policies, practices and resource flows are combined into one indicator as there is substantial overlap between them and this would have disproportionately weighted the systemic change scores for each measure scored. Thus, there are four indicators to score under the depth of change. As the indicators that make up the depth of change are complex in nature and can be addressed in a policy or component in varying degrees, and also because these elements can enhance the way in which policies address the width of change, the scoring for depth of change was at a more granular level than for width. Thus, for each indicator, a measure can receive a score of '-1' for a negative effect the policy will have on the indicator, '0' for no effect, '1' for a low positive effect, '2' for a moderate positive effect, or '3' for a highly positive effect.

In the assessment of the NRRPs, a scoring rubric was used for each indicator which guided the assessors through the scoring process to ensure consistency in the application of the framework. This rubric provided a broad outline for what was required for a policy to score -1, 0, 1, 2, or 3 for each depth of change indicator. This could be based on the cumulative extent to which a policy contributed to that indicator (for example, for 'Practices', the number of new economic practices a policy contributes to) or other subjective criteria (for example, 'Power dynamics' where a -1 was based on perpetuating power imbalances, 1 indicates the coverage of fairness and inclusiveness, 2 indicates an explicit consideration of power and privilege and 3 indicates whether the measure strongly reduces power imbalances).

Table 4: Example of a depth of change assessment

	Systemic Change			
Policy Measure	Indicator	SCOPE -1 = Risk 0 = No effect 1 = Low potential 2 = Moderate potential 3 = Strong potential	Systemic Change Score	Measure Score
Policy Measure #1	Policies, practices and resource flows	3		sum of just transition score, natural world score and systemic change score
	Relationships & connections	1	4	
	Power dynamics	1	sum of 4 indicator scores	
	Mental models	-1		



For examples of how component were scored and analysed in our NRRP analysis, please see our <u>Summary Report</u> of the results or the <u>individual country profiles</u>.

Application of methodology

The methodology for the RITC was developed initially for assessment of the NRRPs submitted by EU Member States to the European Commission as part of the RRF. This was a first opportunity to apply the methodology to real-world policies and find the strengths and weaknesses of the methodology itself through assessing the NRRPs in terms of their capacity to bring about a systemic change in the Member States.

Context

NextGenerationEU (NGEU) constitutes the framework of the EU's response to finance the recovery following the Covid-19 pandemic. The stimulus instrument is a limited instrument delivered over a fixed time span of five years (2021 to 2026). All borrowing will have to be repaid by 2058. The bulk of the NGEU fund is directed to the RRF, a newly developed framework to support Member States' recovery from the pandemic.

The RRF is also designed to support Member States in their efforts to recover from the pandemic in a way that makes Member States and the EU as a whole more resilient to exogenous shocks and more sustainable for future generations. This instrument pays particular attention to the green and digital transitions as central challenges for future-fit socioeconomic systems. The EU recognises the centrality of climate-friendly, resource-efficient modes of production and consumption, exploiting the progress of modern technologies explicitly in the guidance for the NRRPs. Six policy areas are outlined in the RRF Regulation to ensure these transitions were prioritised and that long-term resilience was a focus of the recovery. These include the green transition, digital transformation, smart, sustainable and inclusive growth, social and territorial cohesion, health, economic, social and institutional cohesion, and policies for the next generation. Besides the minimum requirements for the green and digital transitions, Member States needed to link their plans to the country-specific recommendations as published yearly in the European Semester. In this, the European Commission ensured the continuity of national development plans according to the local needs and preconditions.

Central to the NRRPs is the adherence to the Do No Significant Harm (DNSH) principle⁴ in a legally binding manner, which predicates that policy proposals shall not cause significant harm to the natural environment. While the concept has been in informal use in international environmental governance for several years, the EU incorporated the DNSH principle in the legislation for the taxonomy on sustainable investment which entered into force in July 2020. The inclusion of the DNSH principle in the RRF guidance and implementation is an innovative tool for policy coherence and an essential element of the assessment process for each NRRP, raising expectations for what public investment can and should do.

After an assessment of the NRRPs in light of the country-specific recommendations, the DNSH principle and the flagship areas, the European Commission has approved the plans and translates them into legally-binding documents.

Process

After the framework for the RITC was developed, several steps were followed in order to apply the methodology to the NRRPs and ensure consistence and quality. First, all members of the project team

⁴ The DNSH predicates that no significant harm is done to six environmental objectives: climate change mitigation, climate change adaptation, sustainable use and protection of water and marine resources, transition to a circular economy, pollution, prevention and control, protection and restoration of biodiversity and ecosystems.

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from ZOE Institute and NEF, both assessors⁵ or reviewers⁶, *piloted the framework with three draft plans*. From the pilot, we were able to identify any gaps in the framework or assessment process and refine it both to ensure the framework could effectively assess the NRRPs when they were published. After the pilot, a *guidance document* was developed with a scoring rubric to clearly define indicators and ensure consistency in scoring between assessors.

As it was uncertain when (or even if) all Member States would submit their plans, we decided to limit the number of NRRPs that we would assess to thirteen: roughly half of the countries in the EU. For this *country selection*, we wanted to ensure representation across geographical regions of the EU and narrowed down a list which encompassed this. This list was slightly modified as countries published their plans to ensure the assessment process could proceed in a timely manner. The final list of countries assessed is as follows: Austria, Belgium, Denmark, France, Germany, Italy, Latvia, Poland, Portugal, Romania⁷, Slovakia, Slovenia, Spain. Overviews and graphs of the results of the assessment for each country can be found on the <u>ZOE Institute website</u>. Final plans that were not available in English were translated using the subscription translation service available from DeepL.

Finally, as most Member States had grouped the reforms and investments in their NRRPs into larger *components* containing groups of related policies, these groups of policies were scored together as components. As these components were divided in different ways according to the Member State, we assigned different policy areas⁸ to each assessor according to their own areas of expertise and so they could assess this same policy area across every plan. As such, scoring for one sector would be more consistent when looking at that sector across different NRRPs and assessors could focus on a deeper knowledge of that sector rather than reading through every policy area within one country's plan.

Prior to the assessment process, components from each NRRP were inputted into a scoresheet based on the framework of the RITC, also including the amount of funding designated for each component or sub-component.

For the *assessment process*, assessors went through their assigned components one plan at a time, marking scores for each indicator and indicating their reasoning. This process served to justify scores allocated and their reasoning to the reviewer who would later read the whole scoresheet. This element was essential for reducing the inherent bias in qualitative assessment and ensuring consistency between similar components across different NRRPs.

For the *review process*, a reviewer read all components across one NRRP, rather than reading one policy area across every NRRP like the assessors. As they did this, they were able to sense-check the score to ensure that all assessors were applying the framework consistently across the different components and there were no unjustified outlier scores. After getting a sense of the plan as a whole, reviewers filled in the scoresheets for the whole-plan score and the policy coherence score. After every plan was reviewed, each was further reviewed by a second reviewer. This ensured that each component score was considered by at least three different people (one assessor and two reviewers).

The application of the RITC to the NRRPs largely showed that while Member States were addressing many of the short-term concerns of Europe's recovery process and the twin digital and green transitions, many fell short on designing policies that would transform societies for long-term systemic change and resilience. The <u>report on the results</u> of the assessments further explores the conclusions drawn from the application of this methodology on the NRRPs^{xvi}.

⁸ Administrative and fiscal reform; social policy, education and employment; mobility; energy; health; biodiversity, bioeconomy and agriculture; culture and tourism; sea/marine; digitalisation; innovation, business and industrial policy; built environment and material use



⁵ People who assessed the components within the NRRPs and assigned scores using the RITC framework.

⁶ People who reviewed the NRRPs at a holistic level and assigned the "whole plan" scores. Reviewers also checked for consistency of scoring across components.

⁷ After we assessed Romania's plan, the country re-published an updated version of its NRRP. We did not re-assess the plan for the updated version.

Reflection

While the political narrative and recognition of the importance of systemic change becomes more and more present, specific methods for measuring and analysing this are still being developed. We hope that this methodology can contribute to this growing body of work to enable policymakers and researchers to assess, analyse, and ultimately, implement systemic change in their policies. However, as with frameworks of this kind, there are inevitably limitations to consider which we'd like to explore in the final section of this brief

First, we faced a trade-off between conducting a detailed analysis and providing a holistic evaluation. Having decided on the latter, our initial analysis did not provide in-depth analysis of the policy measures under consideration. Therefore, framework and process may require further tailoring to be designed for more detailed analysis than we have conducted. This decision was partly made because analyses like these are a time-intensive process and require a lot of detailed information on measures and contextual background. For example, in our demonstration case, the content related to the European Green Deal's renovation wave is not only included in the RRF but also in the Energy Efficiency Directive and the national Long-term Renovation Strategies. All of these policies together inform about the transformative potential of the renovation wave. We decided not to go beyond the policies outlined in the NRRPs themselves. A deeper, more contextualised analysis would be possible using the RITC, but clear boundaries should be drawn about the scope of each unit of analysis.

Building on this, there are important questions to ask about whether one policy on its own can truly deliver systemic change, or whether policies are most impactful on delivering across multiple outcomes when they are considered as a policy package. In the case of the NRRPs, by assessing per component, we assessed a policy package. While some single policies may be able to deliver across multiple objectives, others may not be designed to do so, and instead are better seen in the collective. An example of a single policy delivering multiple objectives can be seen in the Austrian plan, where a new public transport ticketing system not only incentivises sustainable mobility, but also offers financial support to elderly, young people, and disadvantaged groups, delivering social outcomes alongside environmental ones.

Across the plans, and across public policy in general, policies can be narrowly focussed on their particular field and neglect the negative impacts they may have in another area. An example of this can be seen in the German NRRP where financial incentives to shift to private electric or hydrogen vehicles are not designed to be accessible for lower income groups. Using an assessment tool such as this one illuminates the limitations of such policies which on the surface might look like they deliver positive climate benefits, but in the end may not lead to a large-scale sustainability transformation because of their exclusivity.

As part of the development of the framework, we also began to develop a process for assessing a plan in its entirety to look for policy coherence and clear objectives and goals. This framework was developed based on the *Building a Resilient Economy* report which fall under the broader categories of policy, finance, business and citizens^{xvii}. These twelve areas are those which move societies towards a transformative resilient economy. We did not include this in our assessment process in the end because this concept needed further refinement to support the framework elaborated above.

Second, we recognise the background that each Member State had varying starting points, and these different national contexts might affect their outcome. This means that our assessment did not manage to measure well how ambitious policies are. For the assessment of the NRRPs, the background of the research team and background research on each country allowed us to factor this in to a certain extent, but this remains a limitation of the current process. If this process were to be expanded, the comparability of different countries would need to be considered, and the framework potentially adjusted, if it was applied in a global context. It would need to be improved to better measure ambition, and also understand how that differs across different countries being analysed. We also recognise our Eurocentric point of view in development and the framework may require tailoring to be relevant to



respective geographical, institutional, cultural and political characteristics if applied in a non-European context.

Finally, as with all frameworks which rely on qualitative indicators, there is an element of subjectivity in assessing policies for criteria like just transition and systemic change. While we took several steps to minimise this bias (e.g., three researchers examining each document; following stringent procedures such as the scoring rubric), we are aware that certain biases might persist. By design, the RITC is not so much about precision, but having an effective means to highlight aspects of policy that are particularly aligned with important just transition and natural world elements, both in their scope of width and depth. However, to reduce the subjectivity of the scores as much as possible, all assessors and reviewers for the assessment of the NRRPs followed the same scoring guidance and participated in a pilot of the framework (see: Process).

Conclusions and outlook

The purpose of this brief was to introduce the methodology of the RITC as a framework to operationalise and assess the concept of systemic change. The RITC offers a structure to undertake a qualitative assessment of the transformative potential of policies that considers both the social and environmental spheres of the transition to sustainable, future-fit economies.

Though the word "recovery" is in the name of the framework, it is also applicable beyond a recovering context for any large-scale socioeconomic transformation process. While the index has only been applied in the EU post-Covid-19 recovery context so far, there is great potential for its use in various other contexts. In turn, this could help develop a more concrete understanding of what transformational change means in practice. In times of multiple crises it is vital that policies can be evaluated according to their long-term, cross-sectoral transformative potential. While this age of crises can seem rather daunting, it also holds immense potential for us to transform our world for the better by making sure the necessary systemic change will contribute to the wellbeing of people and our natural environment.

The RITC is a novel, holistic approach to assessing and operationalising systemic change. As we urgently need to develop pathways that allow us to meet the 1.5 degree targets of the Paris Agreement while also not leaving anyone behind, the development of an index like the RITC was long overdue. The assessment facilitates policymakers to envision the potential of investments to transform the socioeconomic system beyond economic recovery, offering a structured approach to step back and assess whether policies put forward align with long-term goals. Consideration of policies beyond single focus areas is necessary to promote a social ecological transformation, to envision a long-term recovery process that is socially just, protects the natural world, strengthens climate action and paves the way for a sustainable, future-fit economy. To do this a systemic approach is necessary.



References

ⁱ Ballweg, M., Bukow, C., Delasalle, F., Dixson-Declève, S., Kloss, B., Lewren, I., Metzner, J., Okatz, J., Petit, M., Pollich, K., Potočnik, J., Schwarzmann, A., Stuchtey, M. R. & Vincent, A. (2020). A System Change Compass: Implementing the European Green Deal in a Time of Recovery. SYSTEMIQ, The Club of Rome. Retrieved from https://www.systemiq.earth/wp-content/uploads/2020/11/System-Change-Compass-full-report final.pdf

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/882222/The_Economics_of_Biodiversity_The_Dasgupta_Review_Interim_Report.pdf

- ^{III} Avent, R. (2020). Covid-19 Leaves a Legacy of Increased Inequality. London: The Economist Group Limited.
- ^{iv} Kania, J., Kramer, M., Senge, P. (2018). The Water of Systems Change. FSG. Retrieved from https://www.fsg.org/publications/water of systems change#:~:text=Foundations%20involved%20in%20syst ems%20change,means%20to%20shift%20these%20conditions
- ^v Barth, J., Coscieme, L., Dimmelmeier, A., Kumar, C., Mewes, S., Nuesse, I., Pendleton, A., Trebeck, K. (2020). Analysing Options for Systemic Change to Transform the World's Economic and Financial Systems. Bonn: ZOE Institute for Future-fit Economies.
- vi Feola, G. (2015). Societal transformation in response to global environmental change: A review of emerging concepts. Ambio, 44(5), 376-390.
- vii Geels, F. W. (2002). Technological transitions as evolutionary reconfiguration processes: a multi-level perspective and a case-study. Research policy, 31(8-9), 1257-1274.
- viii Ballweg, M., Bukow, C., Delasalle, F., Dixson-Declève, S., Kloss, B., Lewren, I., Metzner, J., Okatz, J., Petit, M., Pollich, K., Potočnik, J., Schwarzmann, A., Stuchtey, M. R. & Vincent, A. (2020). A System Change Compass: Implementing the European Green Deal in a Time of Recovery. SYSTEMIQ, The Club of Rome. Retrieved from https://www.systemiq.earth/wp-content/uploads/2020/11/System-Change-Compass-full-report_final.pdf
- ix The European Parliament and the Council of the European Union. (2021). Regulation (EU) 2021/241 of the European Parliament and of the Council of 12 February 2021 establishing the Recovery and Resilience Facility. Official Journal of the European Union L57. Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021R0241&from=EN
- ^x European Commission. (2021). Technical guidance on the application of 'do no significant harm' under the Recovery and Resilience Facility Regulation. Official Journal of the European Union C58. Retrieved from https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021XC0218%2801%29
- xi Ballweg, M., Bukow, C., Delasalle, F., Dixson-Declève, S., Kloss, B., Lewren, I., Metzner, J., Okatz, J., Petit, M., Pollich, K., Potočnik, J., Schwarzmann, A., Stuchtey, M. R. & Vincent, A. (2020). A System Change Compass: Implementing the European Green Deal in a Time of Recovery. SYSTEMIQ, The Club of Rome. Retrieved from https://www.systemig.earth/wp-content/uploads/2020/11/System-Change-Compass-full-report final.pdf
- xii Dirth, E., Barth, J., Miller, C, Bertram, L., Korinek, L., Hafele, J. (2021). Systemic Change for a Resilient Europe: Sustainable Transformation through the NRRPs. Transformation Policy Brief #4. Bonn: ZOE Institute for Future-fit Economies.
- xiii Janoo, A., Bone Dodds, G., Frank, A., Hafele, J., Leth, M., Turner, A., Weatherhead, M. (2020). Wellbeing Economy Policy Design Guide. How to Design Economic Policies That Put the Wellbeing of People and the Planet First. Wellbeing Economy Alliance. Available on https://weall.org/policyguide
- xiv Barth, J., Coscieme, L., Dimmelmeier, A., Kumar, C., Mewes, S., Nuesse, I., Pendleton, A., Trebeck, K. (2020). Building a Resilient Economy: Analysing Options for Systemic Change to Transform the World's Economic and Financial Systems. Bonn: ZOE Institute for Future-fit Economies.
- ^{xv} International Union for Conservation of Nature (IUCN). (n.d.). Nature-based Solutions for People and Planet. Available on https://www.iucn.org/theme/nature-based-solutions
- xvi Dirth, E., Barth, J., Davies, W., Gründahl, M., Hafele, J., Korinek, L., Kiberd, E., Miller, C. (2021). A Future-fit Recovery? A Sectoral Analysis of Practices for Promoting Systemic Change in the NRRPs based on thee Recovery Index for Transformative Change (RITC). Bonn: ZOE Institute for Future-fit Economies. Available on ZOE Institute 2021
- ^{xvii} Barth, J., Coscieme, L., Dimmelmeier, A., Kumar, C., Mewes, S., Nuesse, I., Pendleton, A., Trebeck, K. (2020). Building a Resilient Economy: Analysing Options for Systemic Change to Transform the World's Economic and Financial Systems. Bonn: ZOE Institute for Future-fit Economies.



Dasgupta, P. (2020). The Dasgupta Review. Independent Review on the Economics of Biodiversity. UK Treasury Interim Report. Retrieved from