

On the Sustainability Performance of the European Union's Economic Recovery Strategy – A Case Study with Lessons for Policymakers

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Brief Communication

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Abstract

The European Union pursues an economic recovery strategy with explicit environmental considerations but less clear alignment with broader sustainable development objectives. Using as a case study one national Recovery Plan that was published in May 2021, we perform a rapid but detailed sustainability assessment of its measures. At times when policymakers need immediate advice, this framework helps identify weaknesses and guide the inclusion of sustainability-oriented policies in national budgets.

Background

The European Union is among the pioneers in pursuing the United Nations' Agenda 2030 with its Sustainable Development Goals (SDGs). After adopting the European Green Deal in late 2019 with wide-ranging environmental goals, EU leaders also decided to integrate the SDGs in the bloc's formal annual procedures for the coordination of national economic policies (the so-called European Semester process). In summer 2020, the EU responded to the challenges posed by the pandemic with a package of policies and funds to boost economic recovery while pursuing Europe's green transition.

The main part of the EU's legally adopted recovery package will fund all Member States according to specific Recovery and Resilience Plans (RRPs). These Plans contain investments and reforms that were submitted by national governments to the European Commission, the EU's executive body, in April and May 2021 [i]. Among other legal obligations, countries must align these plans with policy recommendations made by the Commission through the European Semester process and must contain a minimum amount of funds devoted to climate policies. However, EU countries were not obliged to align their RRP with SDGs. This lack of explicit linkage makes it difficult to assess whether the recovery packages address environmental, social and economic sustainability challenges in each country.

Here we present a rapid sustainability assessment of the RRP of the Republic of Cyprus, which was submitted to the European Commission on 14 May 2021 [ii]. Being a small member state in the European periphery, Cyprus is not representative of EU countries to which most of the recovery funds are directed. Nevertheless, it offers a useful example because the country's sustainability score [iii], as reported by the UN Sustainable Development Solutions Network (SDSN), is quite low for European standards and can exemplify the importance of mainstreaming SDGs in national economic policies – which is relevant for many countries around the world. Although several EU Member States have provided a SDG-related appraisal of their RRP, the assessment shown here goes beyond official reports: firstly by also incorporating in the analysis the Six Transformations approach to sustainability [iv], secondly by comparing this assessment with the country's score in SDSN's national SDG analysis, thereby underlining the gaps in policy design that need to be remedied by national authorities, and finally by connecting these findings with broader EU policies.

More specifically, we address four policy-relevant questions:

1. Based on a weighted score, how much the RRP contributes to SDGs and the Six Transformations to achieve them.
2. Which individual measures of the RRP contribute more strongly to progress towards SDGs.
3. Which SDGs are insufficiently addressed by the RRP.
4. What additional considerations are necessary to align policy with sustainability objectives.

To address the first two questions, a detailed assessment of the RRP was performed. The RRP of Cyprus contains 134 groups of measures in total, comprising both public investments and institutional reforms in diverse sectors of the economy. After examining the description of each one of these measures, it was assessed to what extent they contribute to one or more of the seventeen SDGs. We adopted the framework of the Six Transformations and assessed how much the RRP affects each Transformation and each individual SDG. We used a four-point scale for this purpose in line with Sachs et al.⁴, as described in the Methods section. Figures 1 and 2 display some of the results. As regards Transformations, the formal requirement of EU legislation to devote a substantial part of the recovery funds to decarbonisation and digitalisation can explain the importance for Transformations 3 and 6 respectively. Measures related to climate policy and circular economy also contribute to Sustainable Cities (Transformation 5). Moreover, a major portion of the RRP is devoted to constructing facilities for children with special needs, vocational training and reskilling the work force (Transformation 1). On the other hand, less importance has been attributed to the food system, sustainable agriculture and healthy lifestyles, which explains the smaller importance of Transformation 2.

A more detailed overview is possible when observing the contribution of the RRP to individual SDGs (Figure 2). While a sizable part of the total budget is devoted to digitalisation and decarbonisation measures, thereby directly affecting SDGs 9 (innovation & infrastructure) and 13 (climate action) respectively, much less attention has been paid to SDG 2 (that includes food security, improved nutrition and sustainable agriculture) and SDG 14 (marine resources). At the same time, these graphs have to be interpreted with caution: a large number of institutional reforms promotes SDG 16, but since these are low-budget measures they appear with relatively less importance in Figure 2; if this assessment focuses on the number of measures addressing each SDG and not on the budget, SDG 16 becomes the second most importantly targeted goal by the RRP of Cyprus. Further relevant information is provided in supplementary material online.

Coming to the second question, we applied the same scoring approach to each individual measure of the RRP. We found that the 'best' interventions are those which contribute to several sustainability objectives at the same time, e.g. modernise the economy, enable the low-carbon and low-pollution transition and promote social inclusion. Examples of such interventions are: a biogas unit which utilises livestock waste in a rural area; a support scheme for energy efficiency investments in households suffering from energy poverty; dedicated research programmes for the green transition; and vocational training programmes offering digital, green, blue and entrepreneurship skills.

This multi-dimensional mapping provides insights into the third question. As explained in the Methods section, if one observes the sustainability score of Cyprus according to the latest SDSN Sustainable Development Report and compares with Figures 1 and 2, it becomes obvious that policies related to SDG 2 are lagging behind in the country's recovery package. Changing diets and improving sustainability of agricultural practices need to be addressed much more consistently in national policies. As each SDG is composed of several indicators, a more detailed analysis highlights additional areas where the RRP does not address challenges adequately; this is the case e.g. in biodiversity and groundwater pollution, which are part of SDG 15, or the green space in urban areas that is included in SDG 11.

The analysis summarised above leaves room for further explorations that are meaningful for policymakers. The use of SDGs is a useful tool to assess the extent to which sustainability considerations are mainstreamed in public budgets, but the analysis has to be made in depth, using expert knowledge of the policy details, and not mechanistically. Moreover, such an appraisal needs to be complemented by at least two additional approaches. First, indicators are necessary to assess actual implementation of these measures for ensuring delivery of the expected benefits. For this purpose, top-down indicators may be useful, similar to the macroeconomic scoreboard used in the European Semester process[v] or the OECD Circular Economy Scoreboard[vi]. Second, it is essential to explicitly consider the time horizon of different impacts. Additional analysis[vii] is necessary to distinguish trade-offs and synergies between short-term and long-term impacts as the EU recovery packages have different objectives – for example, social impacts may be more important for providing economic relief in the next two or three years, some economic and green impacts are designed to contribute to environmental and economic development targets for 2030, while other impacts are relevant for the longer term, such as the climate neutrality target for 2050 and other objectives of the European Green Deal.

This framework has to be included in all public budgets and not only to RRP, which are a major but not the only source of funding for investments and reforms in EU Member States. Current initiatives at OECD and EU level mainly focus on 'Green Budgeting'[viii], which is an important starting point towards full consideration of SDGs in governmental actions.

This Communication has presented a pragmatic framework for assessing the sustainability performance of public investments and reforms, based on a detailed analysis of the recovery plan of an EU country. Although sophisticated algorithms have been devised to automatically discern the links between different policies and SDGs[ix], proper policy appraisal requires detailed knowledge of the individual measures and exercising expert judgement in order to understand the extent to which each measure contributes to sustainability goals, in line with the four-point scale used here. Despite the fact that more comprehensive policy and governance frameworks have been described in other studies[x][xi], and questions on policy coherence have been posed[xii][xiii][xiv], the analysis presented here can enable a rapid appraisal of public policies that can be easily taken up by decision makers. Similar analyses for a larger number of countries would be needed to draw EU-wide policy conclusions, yet the framework shown here can help rapidly

improve economic policy design, now that the policy environment is changing fast, and policymakers are required to act in both a timely and efficient manner to the challenges of a post-pandemic world.

- [i] National Recovery and Resilience Plans (European Commission, 2021).
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Methods

The RRP of Cyprus includes 134 groups of measures to be implemented between 2021 and 2026 according to a tight time schedule. Out of these, 68 are institutional reforms in different sectors of the economy, ranging from changes in the evaluation of school teachers to modernization of the judicial system to a green tax reform. The other 76 measures constitute investments, which comprise both direct investments in e.g. hospitals, social benefits to vulnerable citizens and public infrastructure, and support schemes in the forms of grants or subsidized loans that will help mobilize private funds towards e.g. modernization of industrial equipment, energy renovations of buildings, electric vehicle charging stations etc. Overall, the RRP encompasses five main categories of interventions (called policy axes) under the following headlines: Public health, civil protection and lessons learned from the pandemic; accelerated transition to a green economy; strengthening the resilience and competitiveness of the economy; towards a digital era; and labour market, social protection, education and human capital.

Applying the Six Transformations framework⁴, we considered the importance of each measure towards each sustainability objective. As a reminder, the Six Transformations towards achieving the SDGs are the following: Education, Gender, and Inequality; Health, Wellbeing, and Demography; Energy Decarbonisation & Sustainable Industry; Sustainable Food, Land, Water, and Oceans; Sustainable Cities and Communities; and Digital Revolution for Sustainable Development.

For this purpose, the contribution of each one of the 134 measures to each Transformation and each SDG was assigned a different score depending on whether it directly contributes towards a Transformation/SDG (score 3), reinforces it (score 2), enables it (score 1) or does not have any impact at all (score 0). No negative outcome on any SDG was assumed, i.e. no trade-offs between objectives were considered, because the EU Recovery Regulation has several safety checks. For example, every RRP measure must comply with the 'Do No Significant Harm' Principle in line with Sustainable Finance rules, for all main environmental objectives (climate change mitigation and adaptation, pollution, circular economy, protection of nature as well as water and marine resources). Moreover, the Regulation demands compliance of each country's RRP with the EU Pillar of Social Rights, and complementarity and coherence with long-time goals. We performed an additional weighting by using the squares of the 0-4 scale and arrived at essentially the same results.

To address question 2, each measure of the RRP was assigned a score for its overall effect on SDGs based on the 4-point scale mentioned above. At the level of individual measures, the highest-ranking interventions were the following:

- Research and innovation funding on green transition
- Skilling, reskilling and upskilling the work force: strengthening digital, green, blue and entrepreneurship skills of the unemployed, people over 55 and with special emphasis on unemployed women
- Support schemes for the reduction of greenhouse gas emissions in industries, businesses and organisations
- Upskill the existing farmers' community and professionalise future labour force by investing in human capital
- Valorisation of livestock waste and animal by-products and construction of a biogas production unit
- Promoting renewables and individual energy efficiency measures and tackling energy poverty in households with disabled people.

On question 3, we delved into the specific assessment of Cyprus that is included in SDSN's Europe Sustainable Development Report 2020. According to this, 'major challenges remain' for Cyprus in SDGs 2, 5, 6, 9, 11, 12, 13, 14, 15, 17. Out of these, performance has deteriorated in SDG 2 and has been stagnant in SDGs 5, 6, 11, 12, 13, 15. Based on answers to questions 1 and 2 above, it becomes clear that the major gap is in SDG 2; the Cyprus RRP does not adequately address issues in which Cyprus performs below average in this SDG, more specifically in the following indicators:

- Prevalence of obesity
- Human trophic level (e.g. how much meat is included in the diet of the population)
- Nitrogen balance on agricultural land
- Ammonia emissions in agriculture.

It is therefore evident that national policies and budget should clearly prioritise SDG 2. Other areas of priority were also identified when looking at the score of the country in individual indicators that are included in other SDGs, as explained in the main part of this Communication.

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Figures

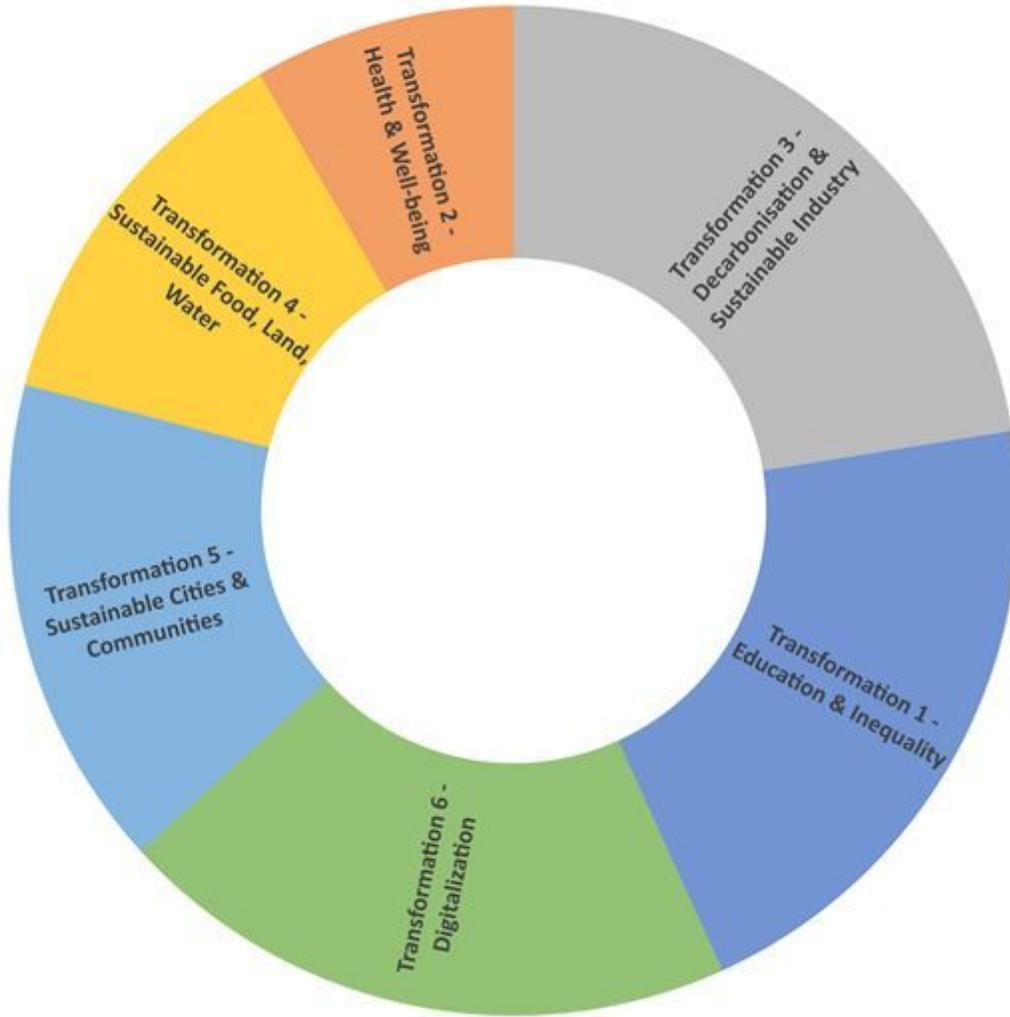


Figure 1

Contribution of the RRP to the Six Transformations Towards Achieving SDGs, based on the number of individual measures addressing one or more Transformations and each measure's relative contribution using a 4-point scale.

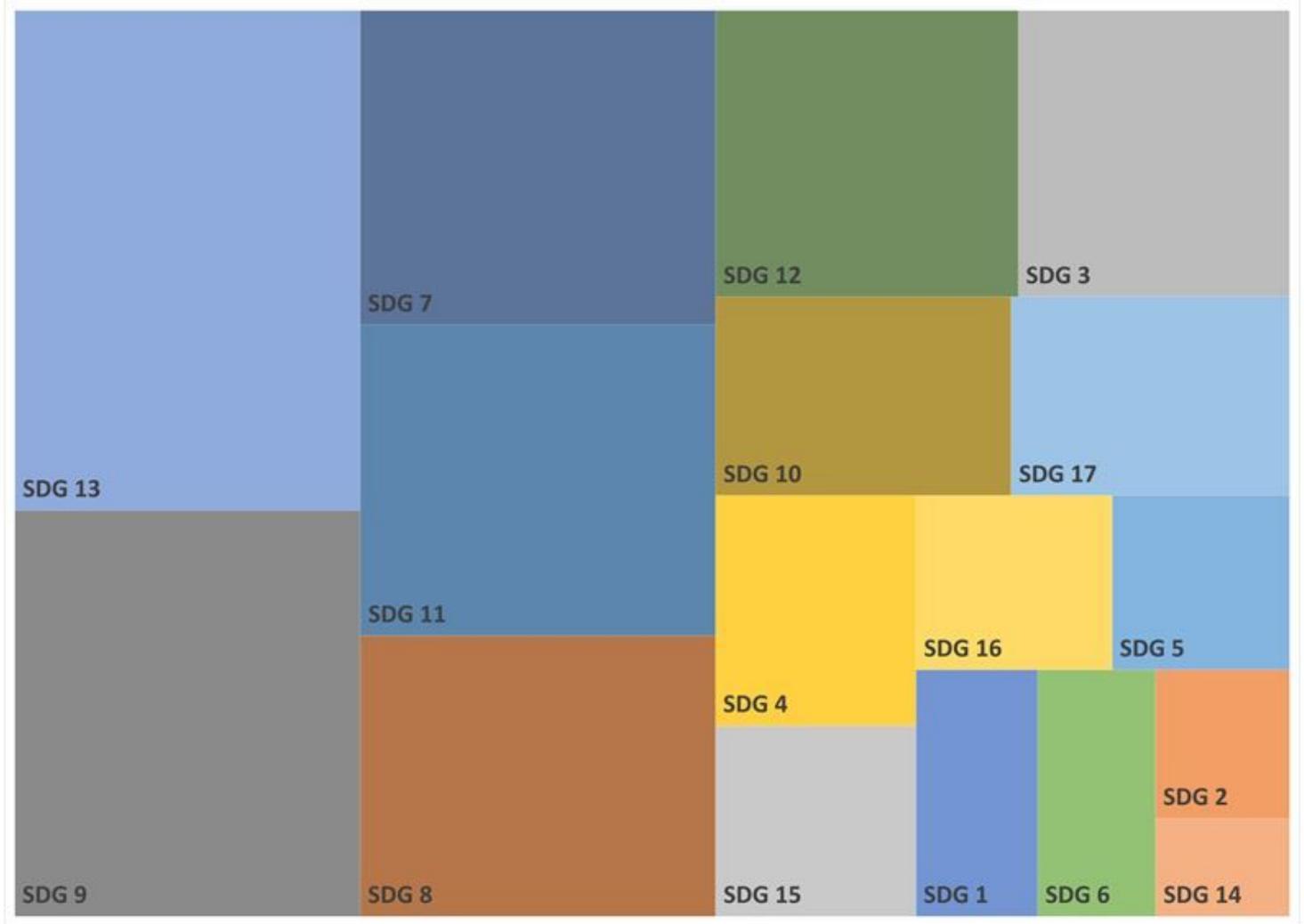


Figure 2

Importance of SDGs addressed by the RRP based on the budget allocated to measures and their relative contribution to each SDG using a 4-point scale.

Supplementary Files

This is a list of supplementary files associated with this preprint. Click to download.

- [FinalRRPSDGsTransformations.xlsx](#)