Sharing societal metabolism insights with European Policymakers: Main Messages for Policy Makers

Overview

MAGIC "Moving Towards Adaptive Governance in Complexity: Informing Nexus Security" seeks to understand how to govern complexity, with reference to five policy areas (Common Agricultural Policy; Natura 2000; Circular Economy; Energy Efficiency and Renewable Energy Directives; and Water Framework Directive). These policies, combined with many others, are utilized to enable the European Union and its Member States to contribute to the UN Sustainable Development Goals. However, achieving the SDGs is challenging; and the response has been critiqued as inadequate.

What have we learnt?

The nexus is often addressed as a biophysical challenge, requiring better understanding of the interconnections between water, energy, food and environmental systems, and how these can be managed to become more efficient. In MAGIC, we also emphasise the need to understand the processes involved in governing the nexus, and to consider nexus as an issue of values, norms and preferences.

To achieve this, in MAGIC we conduct three quality checks:

- 1. What is the problem?
- 2. What is the solution?
- 3. What is the process?

Using a post-normal science approach, we analyse the narratives being used by the main actors in the Commission, agencies and other institutions: these three questions draw attention to where there are problems with existing approaches. For example, does CAP support SDG2 (zero hunger), SDG13 (climate action) and SDG15 (life on land)?

- 1. Problem framing: CAP is relatively energy-blind and tends to focus on intensity indicators of emissions rather than looking at the extent of emissions and embodied energy in materials e.g. phosphate-based fertilizers. Therefore, it may not fully enable the emissions reductions required to achieved SDG13.
- 2. Solutions: Current CAP subsidies, despite cross-compliance and greening payments, are correlated with unsustainable soil depletion in most Member States. This may threaten progress to both SDG2 and SDG15. Furthermore, there are environmental and food security concerns associated with imports of agricultural inputs (e.g. soya livestock feed), but if the EU were to 're-internalize' the production of these inputs, this could jeopardize the delivery of its biodiversity targets. Achieving sustainable agriculture for SDG2 and SDG15 may entail governance encompassing not only agricultural production, but also consumption systems.
- 3. Process: Despite the existence of inter-service groups and the impact assessment process to promote policy coherence, in practice there is diffuse responsibility for policy coherence, and unclear accountability mechanisms for how policies such as the CAP deliver to the SDGs. In particular, the embedded and indirect consequences of existing policies i.e. spillover effects may not be given sufficient attention.

Actors within the commission are often aware of these challenges but may be unable or unwilling to orchestrate major policy shifts or institutional transformations themselves. Presenting evidence of why policies aren't achieving their desired objectives is necessary but not sufficient: it requires attention to the barriers to governance shifts; and working with those seeking to change the system whilst remaining transparent and robust in our analysis.

Key messages

The nexus is not only a technical problem but requires attention to how the problems are framed, to whether the solutions are feasible, viable and desirable; and to transforming institutions and governance processes. The MAGIC approach can assist in this. Reliance on existing initiatives for policy coherence and sustainable development indicators may not be enough to achieve the SDGs—in particular, we need an implementation strategy and indicators that pay attention to embedded and indirect spillover effects.



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