



SUPPORTING THE IDENTIFICATION OF POLICY PRIORITIES AND RECOMMENDATIONS FOR DESIGNING A SUSTAINABLE TRACK TOWARDS CIRCULAR BIO-BASED SYSTEMS

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Six Pathways to Smart Certification of Bio-based Systems
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SUSTRACK in a Nutshell

- **Full name of the project:** Supporting the identification of policy priorities and recommendations for designing a sustainable track towards circular bio-based systems
- **Start date:** 01.11.2022 > **End date:** 31.10.2025
- **Funded under:** Horizon Europe | [HORIZON-CL6-2022-CIRCBIO-01-03](#) | Coordination and Support Actions (CSA)
- **Abstract:** The transition from linear fossil-based systems to circular and bio-based systems holds opportunities for reconciling sustainable long-term growth with environmental protection. However, a critical assessment of the environmental, social, and economic impacts of the linear economy, as well as of the improvement potential associated with circular systems, is needed to underpin the identification of policy priorities. Accordingly, SUSTRACK aims at supporting policymakers in their efforts to develop sustainable pathways to replace fossil and carbon-intensive systems with sustainable circular and biobased systems, contributing to achieving the European Green Deal's objectives.
- **Website:** <https://sustrack.eu/>
- **Social media:** [Twitter](#), [LinkedIn](#)

SUSTRACK Main and Specific Objectives

1  provide knowledge and tools for monitoring and assessing the environmental, social and economic impacts of both the linear, fossil-intensive economy and a circular, bio-based economy

2  identify priorities and defining actions to support policy makers in their efforts to promote the sustainable transition, in consideration of EU, local and cross-territorial value chains.



To identify, assess and prioritise the environmental, economic and social limits of a linear, carbon-intensive and fossil-based economy



To develop knowledge and tools for monitoring and assessing the impacts of circular, bio-based versus linear, fossil-based production systems



To assess the environmental, social and economic impacts of the sustainable transition

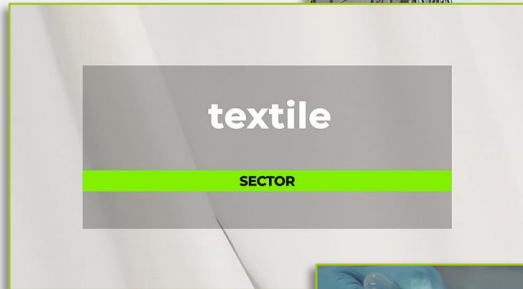


To create, simulate and interpret a variety of scenarios for the sustainable transition



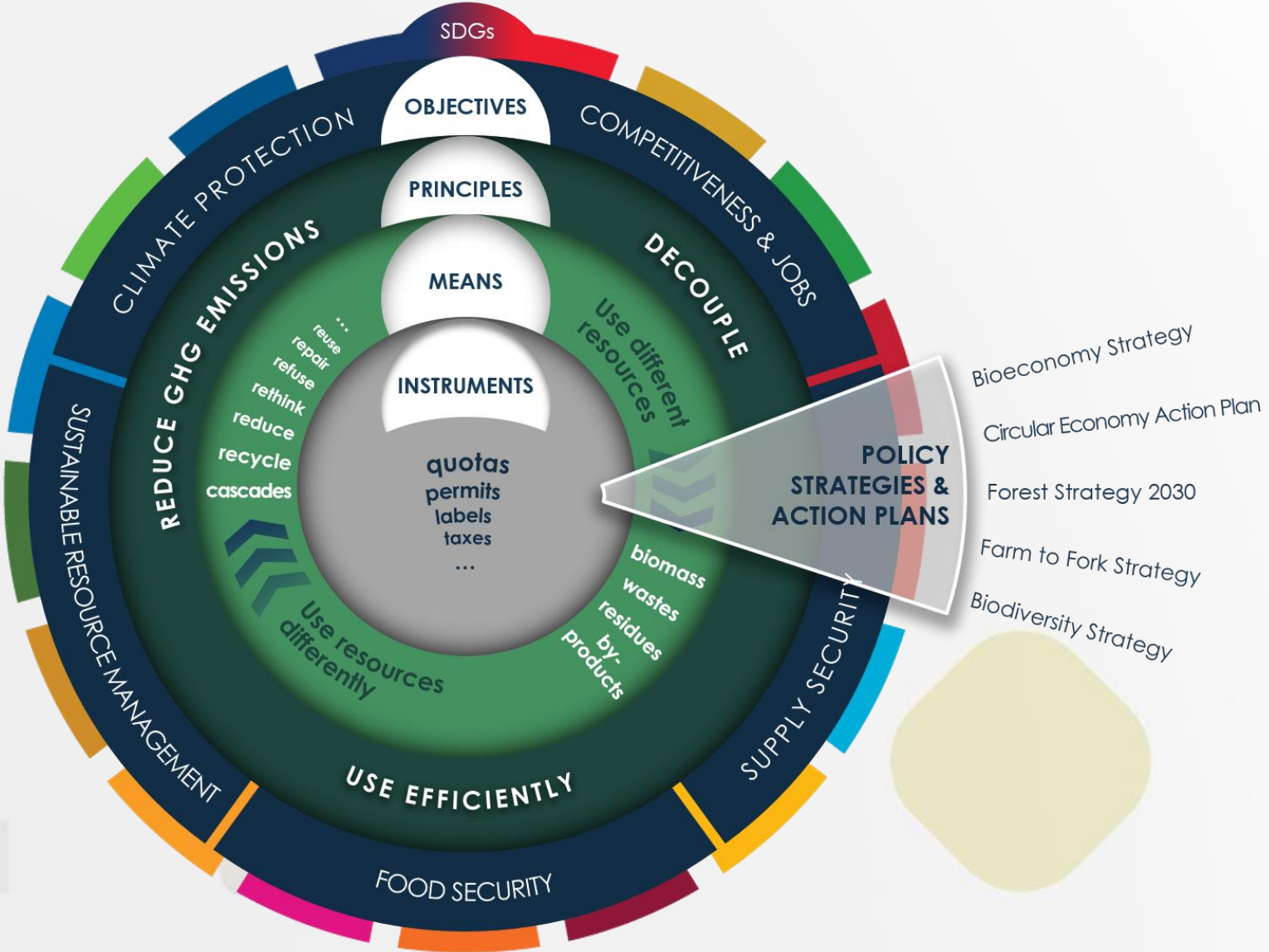
To identify policy priorities, define corresponding policy actions and provide recommendations

Sectors of interest

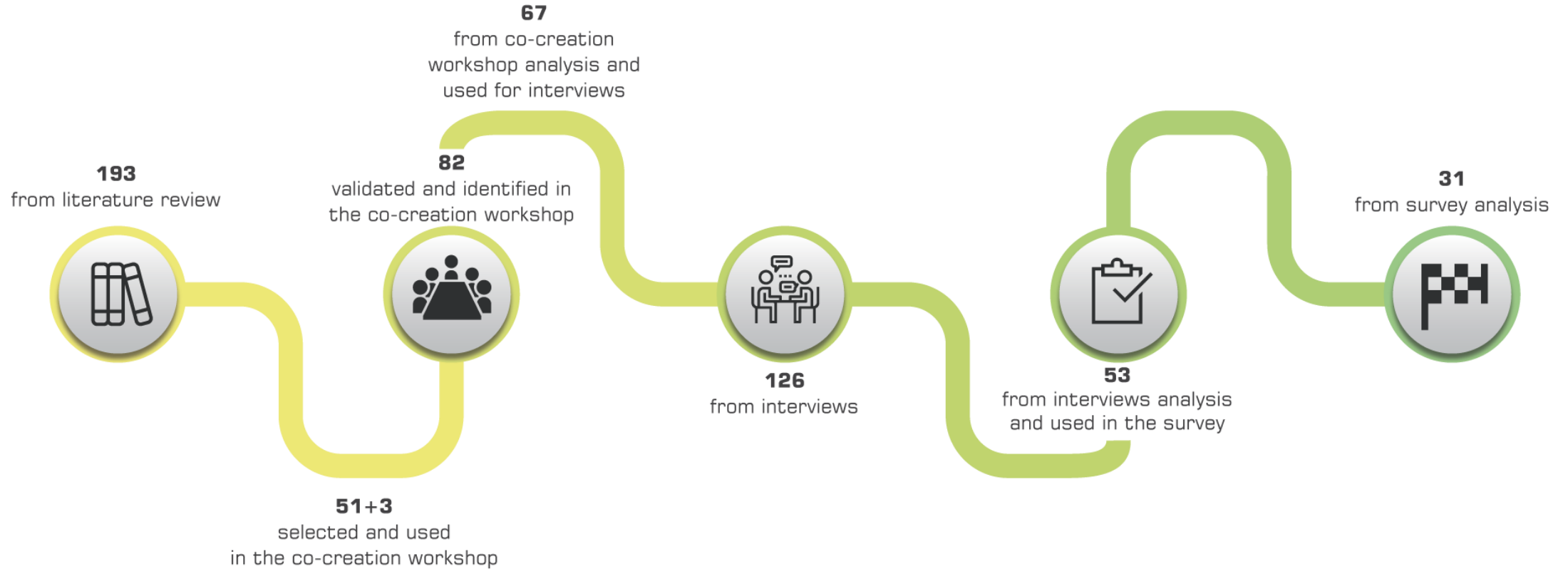


Sector	Case study
Construction	Cross-laminated timber
	Biochar as an additive in concrete
	Hemp insulation
Textile	Recycled carded wool from Prato, Italy
	Man-made cellulosic fibres, like Lyocell
	Latxa sheep wool from the Basque Country of Spain
Chemical	Chemicals from waste
	Bio-MEG, bio-MPG, and renewable functional fillers from wood
Plastic	Polylactic acid (PLA)
	Polypropylene from used cooking oil

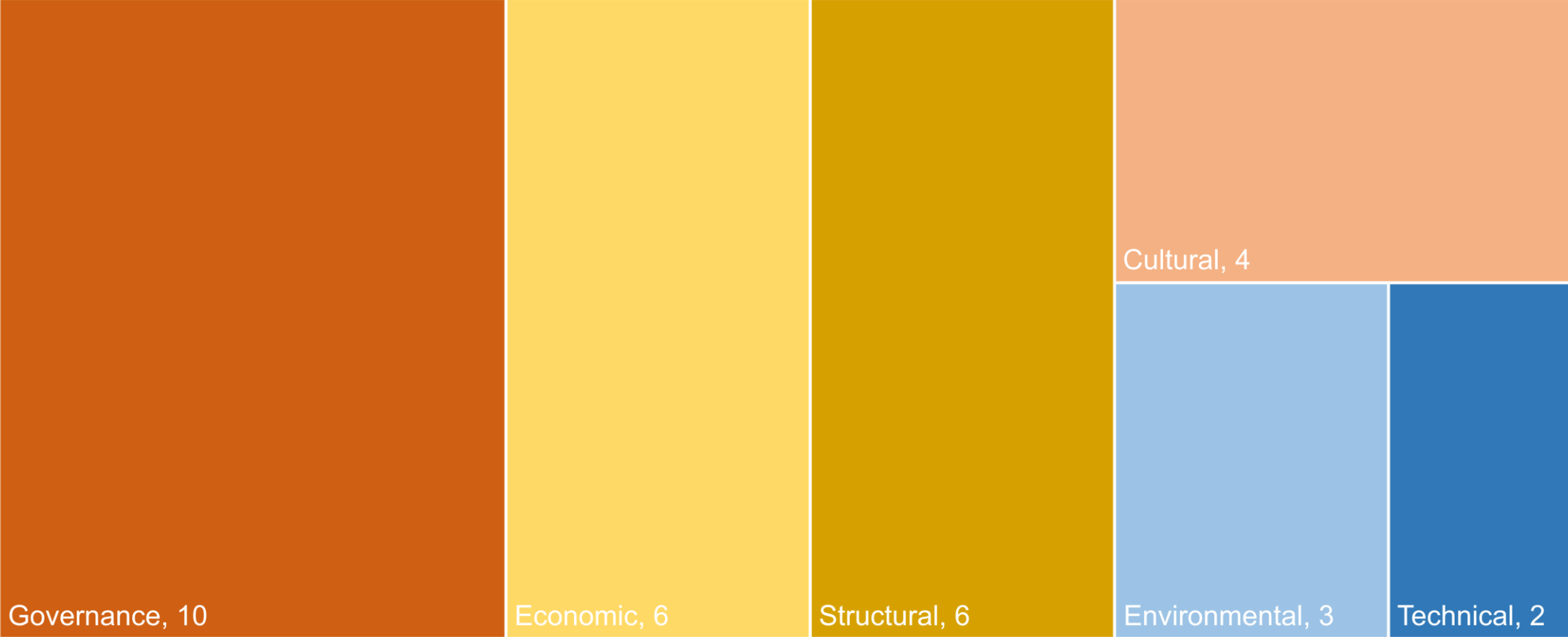
SUSTRACK's Definition of Circular Biobased Economy



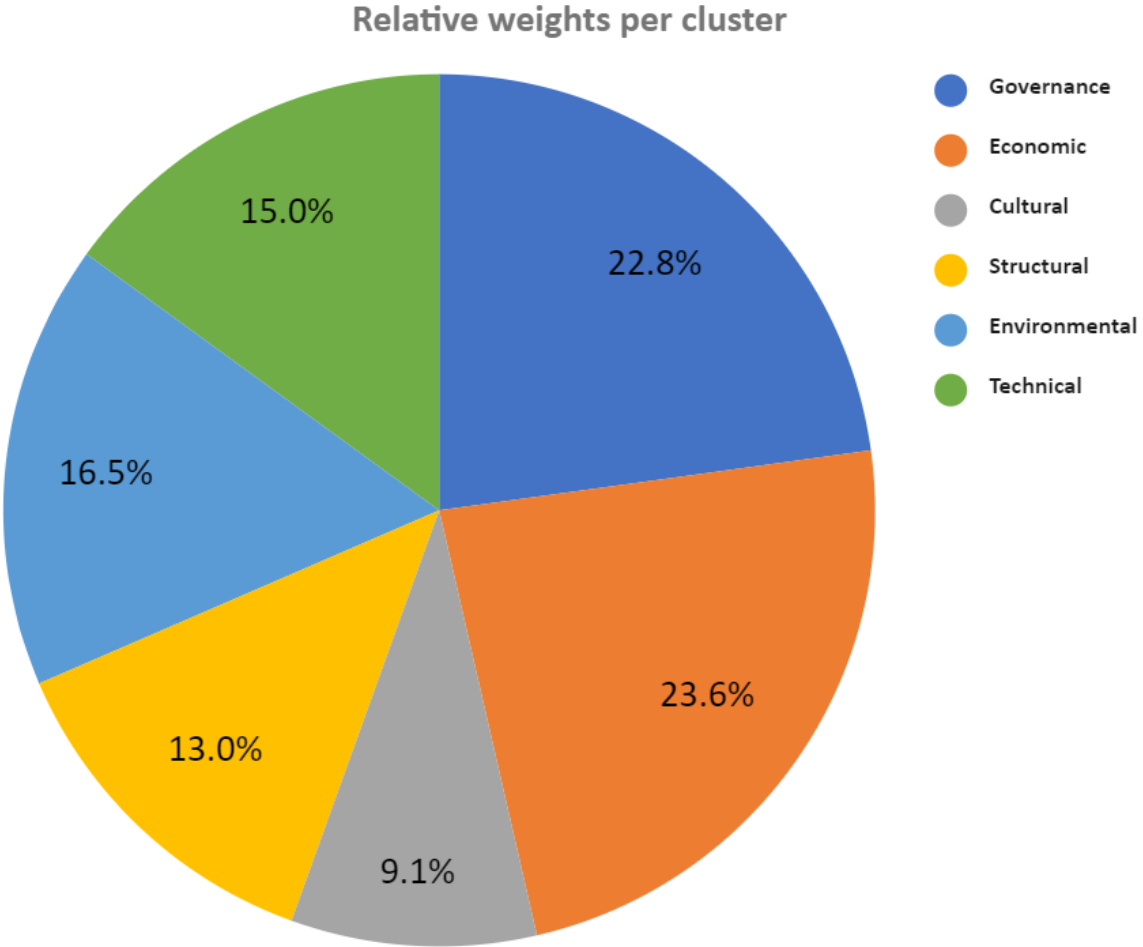
Barriers to the Transition



Barriers to the Transition



Barriers to the Transition



Top-Ranked Barriers to the Transition

Cluster	Barrier
Economic	Weak cost competitiveness: bio-based vs. fossil-based ingredients, materials or products
Environmental	Lack of harmonised methods for environmental, climate and sustainability impact assessment
Cultural	Consumer confusion and lack of trust due to generic sustainability claims and the proliferation of certification schemes and labels
Governance	Competing political interest with fossil-based industries
Structural	Lack of value chain stakeholder collaboration
Technical	Incompatible and/or insufficient infrastructure capacity for EoL product collection, storage and management

The Most Influential Barriers to the Transition

Cluster	Barrier
Governance	Competing political interests with fossil-based industries (big lobbies etc.)
Structural	Social and technical lock-ins to the current linear system
Governance	Fragmented regulatory framework across European countries and at national/regional level
Governance	Regulatory complexities and lack of support for the transition at government level

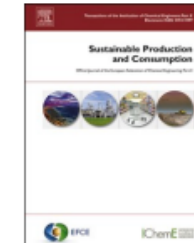
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Review Article

Barriers to transitioning to a circular bio-based economy: Findings from an industrial perspective

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THANK YOU

