



Visions, opportunities and challenges for the bioeconomy in Southern Europe

Key messages

- The time is now. Technological breakthroughs, the necessity to decouple growth from carbon emissions and the quest for competitiveness are making possible a radical transformation in our production and consumption patterns. Southern Europe needs to prepare for, and jump into, the bioeconomy revolution.
- The bioeconomy touches all aspects of our lives and is intrinsically linked to the sound management of natural resources. Europe needs a framework in which to build a balanced bioeconomy that can create quality jobs, ensure nature conservation and have a positive impact on climate change and the biodiversity crisis.
- Key elements of the bioeconomy framework are: a long term predictable and coherent regulatory framework that promotes cooperation in multiple partnerships; a new culture of risk in financing policies and enterprises; a critical mass in RTD; and an education system that promotes innovation and entrepreneurship.
- It is necessary to develop *innovative bio-products* that not only replace but outperform traditional products and that engage consumers as a key driving force. Societal concerns need to be addressed and communicated transparently. This could require new sustainability criteria and indicators.
- The bioeconomy must be socially inclusive and create proximity value chains at a regional scale, as producer to consumer approaches will lack the necessary economies of scale. Southern Europe has significant opportunities and capacities to build upon.

Full report!



The time is now: Europe needs to jump into the two new revolutions that are taking place. *Bio-economisation* and *digitalisation*. The time is now because:

- It is urgent to replace fossil resources and non-renewable materials, in order to face climate change and provide wellbeing for a rapidly growing global population.
- It will sustain competitiveness: only competitive economies are key in solving the environmental and social crisis.
- Current technological breakthroughs are creating fabulous opportunities to create new bio-based value chains.

Europe needs a framework in which entrepreneurship and innovation build a balanced bioeconomy, creating quality jobs and ensuring sound management of natural resources, nature conservation and a positive impact in the climate change and biodiversity crisis. This policy framework should be based on:

- A long-term predictable and coherent regulatory environment, ensuring a level playing field for bio-based solutions, addressing market failures and providing adequate stimuli.
- The principles of sustainability and resource efficiency to guarantee a significant contribution to climate change mitigation in the long term and to reassure society.
- Increased cooperation in Private-Public, Private-Private, Public-Public partnerships.
- A new culture of risk in politics, enterprise and financing, as winning technologies or pathways are not yet in place and there is no entrepreneurship without risk.
- A sufficient critical mass in research, development and innovation at the regional level, in order to assess the multiple dimensions of the bioeconomy.
- A school system that promotes innovation and entrepreneurship and the adaptation of higher education curricula to provide adequate skills and education.
- Demand-side innovation support to create markets for bio-based products, reducing innovation costs and helping attract resources to transform knowledge into an economic reality.

Innovative bio-products that outperform traditional products must be developed. Better usability and value will engage consumers as a key driving force. It will not be enough to replace petrol-based products with equivalents as this means remaining in a commoditised low value market requiring economies of scale that might be difficult to achieve in southern Europe. It is necessary to develop new, innovative products with greater added value. As an example, new wood engineering products not only significantly reduce carbon footprints in the construction sector, they also outperform other construction materials in thermal and acoustic performance and are extremely appropriate for industrial prefabrication approaches, resulting in reduced installation time and costs, minimal waste and better safety for workers. Resin and Cork offer significant opportunities in this respect.

Bioeconomy solutions must be well-tailored to regional conditions. The bioeconomy must be socially inclusive and create proximity value chains at the regional scale, as producer to consumer approaches will lack the necessary economies of scale. This regional approach requires:

- A long term business strategy, vision shared by multiple actors and a holistic approach.
- Energetic actors in industry, science, policy and civil society, as the bioeconomy requires a change, not only in production, but also in consumption patterns.
- Open, transparent communication at multiple levels to help understand the limits, benefits and characteristics of new processes and bio-products, including new standards, labelling and other consumer rules. Potential concerns regarding sustainability, including trade-offs with biodiversity and implications for food and water security, should be addressed and explained at all stages of the product development cycle.



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