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# Relationship between agriculture and ecological bioeconomy

## Résumé

special session **”Relationship between agriculture and ecological bioeconomy”**  
organizer: Pascal Grouiez

The bioeconomy focuses on how biomass can be used in industrial processes to replace fossil resources. This process raises many questions, such as the conditions for its development, and the ability of industries seeking to invest in bioeconomic business activity to overcome lock-in effects. A central question is that of the circularity of this production process and, more generally, the question of its ecologization and the way biomass – as resource or as sink – can contribute to the development of these industries (including the green industry itself). Few studies, however, focus on how biomass is produced, and more generally how the agricultural sector is affected by the emergence of this new or renewed industries: is agriculture the driving force behind it, or merely a supplier? (Grouiez et al., 2023).

The special session **”Relationship between agriculture and ecological bioeconomy”** looks at how agricultural sector is taking up the challenges of the bioeconomy (”bioeconomy” in the broadest sense of bioeconomy, Vivien et al., 2019), and in particular at the questions that it raises from the point of view of the farmers.

Contributions are expected on agricultural sector as a supplier of biomass or carbon sink through biomass production and the more or less ecological processes it uses to do so; on the economic positioning of agriculture in the bioeconomy as new or renewed industries (captive player in industrial value chains? Autonomous player or even driving force in these chains?).

The topics are manifold: use of biomass for energy purposes, biomass characteristics and production issues; use of agricultural resources, including land, for the development of the green industry itself (e.g., agriculture as a carbon sink under carbon sequestration see Berta et al., 2024). The latter raises the question of the role of public policies or other private and public actors in regulating agricultural sector integration within diversified value chains and markets, through value chains regulation or even through CAP’s greening and carbon market creation).

In this session, scholars are encouraged to take an institutional economics perspective, and in particular a political economy perspective, in the sense that - whatever the selected analytical framework - the focus should be on the way in which agricultural actors are influenced by institutions and industrial organizations in their mode of production and insertion into markets and industries, but also the way in which they themselves contribute to molding institutions through various strategies (bypassing them, lobbying, etc.). Theoretical perspectives may include: Global Value Chain, Global Commodity Chain, Global production Networks, Technological Innovation System, Sectorial innovation System, Business Models, French School of Regulation, Convention School, Proximity School, etc.

## References

Berta, N., & Roux, A. (2024). The endless expansion of carbon offsetting: sequestration by agricultural soils in historical perspective. *Cambridge Journal of Economics*, 48(3), 451-470.

Grouiez, P., Debref, R., Vivien, F. D., & Befort, N. (2023). The complex relationships between non-food agriculture and the sustainable bioeconomy: The French case. *Ecological Economics*, 214, 107974.

Vivien, F. D., Nieddu, M., Befort, N., Debref, R., & Giampietro, M. (2019). The hijacking of the bioeconomy. *Ecological economics*, 159, 189-197.

## First proposal

Grouiez P. "Challenging ecological bioeconomy: from farmers' autonomy to their strategy of biomass supplier in their insertion within biogas production industry in France"

**Mots-Clés:** Agriculture, Bioeconomy, institutional economics, industrial dynamics, carbon sequestration, carbon market