



# Back to the Future: Reintegrating Land and Livestock for Greenhouse Gas Mitigation and Circularity

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The widespread reintroduction of crops and livestock could make a major contribution to the development of the wider EU circular (agricultural) economy and contribute to sustainable growth, through the more effective recycling of materials and resources, the minimization of waste, and a reduction in external supplies of feed and synthetic fertilizers, with potential biodiversity, environmental and soil health benefits.

However, this comes with significant challenges, particularly enteric methane emissions, land degradation due to over grazing and water pollution and the need to effectively substitute inorganic fertilizers with organic manures including the economic consequences of reintroducing livestock, which will be addressed.

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## Objectives

Generate a systems-based understanding of the complex interactions among the different components of the livestock production system, together with the integration of alternative land use options for GHG offsetting and enhanced C storage with the appropriate grazing practices, contributing to enhanced farmland biodiversity and circular economy.

## Collaborating institutes



## Work Packages

- WP 1: Data Collection and Synthesis
- WP 2: Livestock Management and Choice
- WP 3: Manure and Amendment Management
- WP 4: Farming Resources/Choice
- WP 5: Systems-based Decision Support Tools
- WP 6: Direct validation and verification of mitigation action
- WP 7: Economic Impacts and Certification
- WP 8: Dissemination and Communication

## Funded by:

