



# FORBIO Project: fostering sustainable feedstock production for advanced biofuels on underutilised land in Europe

FORBIO Capacity Building Event

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# Project consortium



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## Food and Agriculture Organization of the United Nations

Partner contact name: Marco Colangeli



## Geonardo Environmental Technologies Ltd.

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## Consiglio per la Ricerca in Agricoltura e l'Analisi dell'Economia Agraria

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## Polish Biomass Association

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## European Landowners' Organization

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## University of Limerick

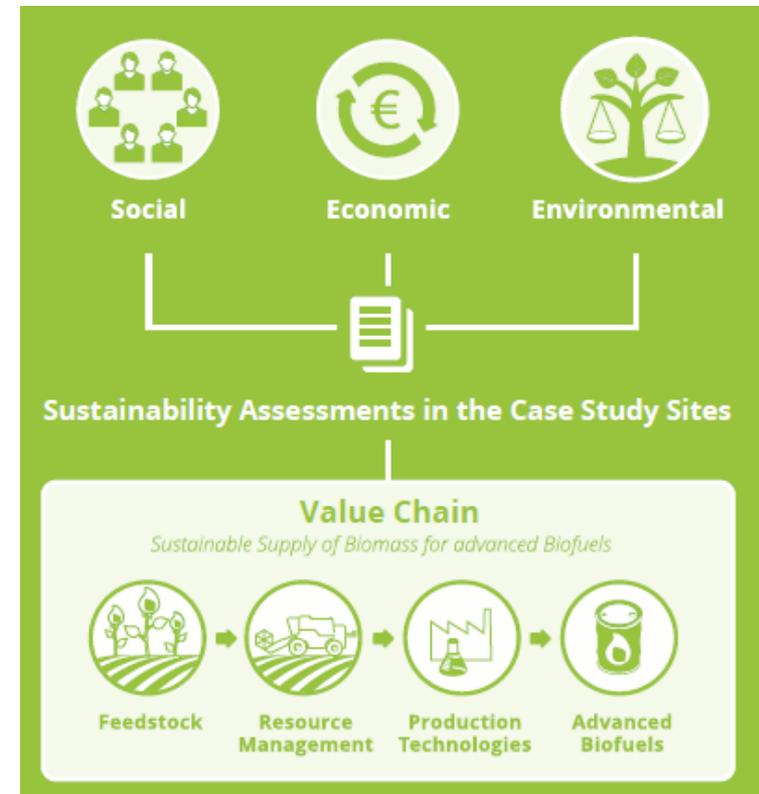
Partner contact name: JJ Lehay



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# Project idea

- ✓ Assess the viability of using underutilised land (contaminated, abandoned, marginal, fallow land etc.) for sustainable bioenergy feedstock production
- ✓ Develop a strategy for building up competitive and sustainable local supply chains
- ✓ No effect on the supply of food and feed
- ✓ No interference with land used for recreational and conservation purposes



# Objectives

- ✓ Identify social, economic, environmental and governance-related **opportunities and challenges**
- ✓ Evaluate **agronomic and techno-economic potential** of the selected bioenergy value chains
- ✓ Assess environmental, social and economic **sustainability**
- ✓ Analyse economic and non-economic **barriers to the market uptake**
- ✓ Develop **strategies** to remove the **barriers**
- ✓ **Encourage** European **farmers** to produce sustainable biomass feedstock
- ✓ **Build capacity** of stakeholders for setting up sustainable bioenergy supply chains



# Selected case studies

## CASE 1

### ITALY

Sulcis, Portoscuso

Contaminated land from industrial activities

22,000 ha



## CASE 2

### UKRAINE

Ivankiv region, Kyiv oblast

Underutilised marginal agricultural land

Over 10,000 ha



## CASE 3

### GERMANY

Metropolis region  
Berlin & Brandenburg

Lignite mining & sewage irrigation fields

1,140-3,917 ha and 7,295-11,795 ha



**Outreach countries: Romania, Poland, Hungary, UK, and Ireland**



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# Sustainability

- ✓ Reference tool: GBEP Sustainability Indicators for Bioenergy
- ✓ Development of a tailored set of sustainability indicators for bioenergy based on the specific conditions of each of the case study sites
- ✓ Compilation of existing environmental, social and economic data and data gaps analysis
- ✓ Measurement of the set of sustainability indicators for bioenergy in the case study sites



# Challenges

- ✓ Reliable data on underutilised lands
- ✓ Little awareness regarding the advantages of using underutilised lands for RES projects
- ✓ Lack of local strategies regarding RES development and valorization of underutilised lands
- ✓ Legal and administrative procedures for getting necessary permits
- ✓ Available investments for new projects



# Added value of FORBIO

- ✓ Data collection via agronomic and techno-economic feasibility studies in Italy, Germany and Ukraine (available on project website)
- ✓ Sustainability assessments
- ✓ Knowledge transfer, capacity building actions (trainings, study tours, webinars)
- ✓ Roadmaps for the removal of the main economic and non-economic barriers
- ✓ Sharing best practices which allow the most sustainable and energy efficient use bio-resources
- ✓ Mainstreaming new opportunities on the local level



# Thank you for your attention!

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