

## DESTINY Project

DESTINY (Design and Sustainability Assessment of Innovative biomass production systems and value-chains in the Bioeconomy) is a Marie Skłodowska-Curie Action - Doctoral Network project, funded by Horizon Europe and coordinated by AgroParisTech. It was developed as part of the EBU (European Bioeconomy University) Alliance alongside 6 other partner universities: University of Bologna (UNIBO - Italy), University of Natural Resources and Life Sciences, Vienna (BOKU - Austria), University of Hohenheim (UHOH - Germany), University of Wageningen (WUR - Netherlands), University of Eastern Finland (UEF - Finland), Warsaw University of Life Sciences (WULS - Poland).

The European political agenda emphasises the advancement of the bioeconomy to address pressing societal issues like climate change and the shift away from fossil fuels. This transition towards utilizing biological resources is expected to raise demand for biomass from forestry and agriculture. However, there are concerns about potential adverse impacts on biodiversity, greenhouse gas emissions, and water resources. It's crucial to ensure that the bioeconomy delivers on its promises of sustainability.

Therefore, DESTINY's main objective is to assess this sustainability by developing new methods and tools and demonstrating how they can be mobilised to maximise system performance in a series of generic case studies across the value chains.

To achieve this, the DESTINY Doctoral Network will train a new generation of researchers: the bioeconomists. The candidates will design sustainable bioeconomy systems for Europe, taking into account a number of disciplines ranging from agronomy to economics as well as political and social sciences.

See the following for the 15 PhD theses:

### **Work Package 3: Biomass Supply System Design**

**Thesis 3.1:** [Designing concepts for sustainable intensification of agrifood chains](#)

For questions on the thesis topic please contact: Prof. Massimiliano Petracci ([m.petracci@unibo.it](mailto:m.petracci@unibo.it))

**Thesis 3.2:** [Model-based approaches to predict the performance of industrial plants on marginal agricultural land in Europe](#)

For questions on the thesis topic please contact: Prof. Dr. Benoit Gabrielle ([Benoit.Gabrielle@agroparistech.fr](mailto:Benoit.Gabrielle@agroparistech.fr))

**Thesis 3.3:** [Understanding the functionalities of agriculture waste streams to redesign crops](#)

For questions on the thesis topic please contact: Prof. Dr Luisa M Trindade ([luisa.trindade@wur.nl](mailto:luisa.trindade@wur.nl))

DESTINY n°101119940

**Thesis 3.4:** [Ecological Relevance of Waste Management in Bioeconomy](#)

For questions on the thesis topic please contact: Prof. Stefan Salhofer  
([stefan.salhofer@boku.ac.at](mailto:stefan.salhofer@boku.ac.at))

## Work Package 4: Bioproduct Value Chains

**Thesis 4.1:** [New business models on biobased textile products](#)

For questions on the thesis topic please contact: Irina Mihailova ([irina.mihailova@uef.fi](mailto:irina.mihailova@uef.fi))

**Thesis 4.2:** [Antiviral activity of woody materials and their coatings in built environment](#)

For questions on the thesis topic please contact: Antti Haapala ([Antti.Haapala@uef.fi](mailto:Antti.Haapala@uef.fi))

**Thesis 4.3:** [Holistic evaluation and interconnected value generation of hemp utilization in material, chemical and pharmaceutical sectors](#)

For questions on the thesis topic please contact: Reijo Lappalainen  
([Reijo.Lappalainen@uef.fi](mailto:Reijo.Lappalainen@uef.fi))

**Thesis 4.4:** [Early-stage evaluation of bio-based production chains](#)

For questions on the thesis topic please contact: Dr. ir. Ellen Slegers ([ellen.slegers@wur.nl](mailto:ellen.slegers@wur.nl))

## Work Package 5: Integrating Sustainability Assessments of Biomass Supply Systems

**Thesis 5.1:** [Assessment of the acceptance of novel sustainable intensification approaches and of their environmental impacts](#)

For questions on the thesis topic please contact: Prof. Dr.Iris Lewandowski  
([iris\\_lewandowski@uni-hohenheim.de](mailto:iris_lewandowski@uni-hohenheim.de))

**Thesis 5.2:** [Augmented Reality for Biodiversity valuation in grassland production systems](#)

For questions on the thesis topic please contact: Prof. Dr. Sebastian Hess ([s.hess@uni-hohenheim.de](mailto:s.hess@uni-hohenheim.de))

**Thesis 5.3:** [Multi-criteria sustainability assessment of innovative biomass supply systems](#)

For questions on the thesis topic please contact: Prof. Dr. Iris Lewandowski  
([iris\\_lewandowski@uni-hohenheim.de](mailto:iris_lewandowski@uni-hohenheim.de))

**Thesis 5.4:** [Comprehensive top-down ecological sustainability assessment of biomass potentials in a bioeconomy](#)

For questions on the thesis topic please contact: Assoc. Prof. Dr. Karlheinz Erb  
([karlheinz.erb@boku.ac.at](mailto:karlheinz.erb@boku.ac.at))

**Work Package 6: Governance, Policies and Markets**

**Thesis 6.1:** [Comparative analysis of the governance solutions for regional bioeconomy systems and the identification of innovative solutions](#)

For questions on the thesis topic please contact: Prof. Dr. Davide Viaggi  
([davide.viaggi@unibo.it](mailto:davide.viaggi@unibo.it))

**Thesis 6.2:** [Analysis and simulation of innovative policy instruments to promote sustainable biomass supply](#)

For questions on the thesis topic, please contact: Assoc. Prof Caroline Orset  
([caroline.orset@agroparistech.fr](mailto:caroline.orset@agroparistech.fr))

**Thesis 6.3:** [Agricultural biomass production management in contrasted European territories](#)

For questions on the thesis topic please contact Prof. Dr. Philippe Lescoat  
([philippe.lescoat@agroparistech.fr](mailto:philippe.lescoat@agroparistech.fr))