



PhD Studentship in Social Impact Assessment of Bioenergy and Bioeconomy Development in Ireland

School of Sociology

<https://www.ucd.ie/sociology/>

BioAssess – An environmental, economic, and social assessment framework for bioenergy and bioeconomy development in Ireland project.

Project Description: BioAssess will develop and test a new framework to analyse the environmental, economic, and social impacts of biomass resource use for production of energy (transport and heat) and biobased products in the bioeconomy in Ireland. BioAssess will integrate data sources on bioresources at regional and national level to produce a national compendium of the biomass resource, with indigenous and imported biomass availability forecast towards 2050. Central to BioAssess is the full supply chain sustainability analysis to examine synergies and trade-offs between using biomass for energy generation and biobased products. BioAssess advances research in sustainability assessment by taking a holistic approach, developing a framework which analyses environmental, economic, and social impacts. The project will develop and assess a number of value chains with the Framework, considering the source of biomass, its end use, where it is being diverted from and what it is displacing, to identify unintended consequences to better inform scheme and policy development. BioAssess will engage with key stakeholders through the Industry Advisory panel including members from industry (energy and farming), local authorities and policymakers, and project workshops (e.g. farmers, foresters, bioenergy processors, bioeconomy companies etc.) to identify important resources, potential valorisation technologies, and inform on the uptake of the BioAssess Framework. The project complements existing National and International research but advances the current state of the art by incorporating consequential life cycle assessment along with economic and social analysis and stakeholder engagement in the development of a Framework for development of sustainable value chains for the bioeconomy.

PhD Project Description: This PhD project will focus on the development of a social framework for the bioenergy and bioeconomy development in Ireland. Social indicators will be identified to be included in the social framework which will then be applied to assessing the social impact of bioenergy and bioeconomy transitions. Data for identification of indicators to be included will be derived from existing literature, social LCA databases, existing secondary data from the Central Statistics Office and qualitative research (e.g., focus groups/semi-structured interviews) with key stakeholders. The identified social indicators will be quantified, and social life cycle assessment will be carried out to assess the social impact of bioenergy and bioeconomy

transitions. The social framework will feed into the overall BioAssess framework (in combination with economic and environmental indicators) and will be tested across different case studies.

The PhD student will work under the primary supervision of Dr Egle Gusciute in the UCD School of Sociology. The PhD student will have a unique opportunity to develop interdisciplinary skills in examining the bioeconomy development which considers environmental, economic, and social impacts, which are in high demand and sought after in academia, research, policy and industry settings.

The ideal candidate will have a degree in social sciences (sociology, politics, economics, geography), sustainability, environmental science or other relevant discipline. The candidate should have strong quantitative and qualitative research methods skills. Excellent organisational and project management skills, a commitment to research, excellent problem-solving skills, the ability to work independently and as part of a multi-disciplinary team and excellent interpersonal and communications skills are also essential.

The candidate will be expected to broaden their knowledge to include social sustainability, including social life cycle assessment within the development of the framework. It is expected that the candidate will have an interest in a holistic approach (environmental, economic, and social) to sustainability, with a particular interest in social aspects. Some knowledge or experience of the bioeconomy in the European or Irish contexts would be helpful but is not necessary.

Stipend: €25,000 tax-free per annum (+ contribution to fees of €6,000 per annum)

PhD Duration: up to 3 years

Informal requests for further details can be made to Dr Egle Gusciute (egle.gusciute@ucd.ie).

Closing date for applications: 5pm Monday 27 May 2024

Interviews are provisionally scheduled to take place in June 2024

Expected PhD start date: September 2024

To apply please follow the instructions [here](#).

Applicants must include their CV, detailed academic transcripts in the form of certified copies of all undergraduate and postgraduate level certificates, a motivation/cover letter and an academic reference letter from previous supervisors, lecturers, or mentors. Candidates must have excellent proficiency in written and spoken English (CEFR Level C1) and provide evidence that they fulfil the specific UCD language criteria.

This PhD is funded by the Sustainable Energy Authority of Ireland (SEAI) and the Department of Agriculture, Food and the Marine.