



## PhD Position on “Travel Behaviour Change”

### Position Summary

The decarbonisation of the Energy System will play a vital role in reducing greenhouse gas emissions and help mitigate the impacts of Climate Change. The technical and societal challenges inherent in decarbonisation are set to be enduring challenges of the mid-21st century and ones that will require a whole of society approach, encompassing academia, industry, government, and citizens.

**Next Generation Energy Systems (NexSys)** is a newly established All Island SFI Strategic Partnership Programme focussed upon the transition to a net zero carbon energy system in Ireland. It is a unique partnership bringing together a multidisciplinary research team, industry, and policy makers to tackle fundamental research questions to be addressed as part of the transition to net Zero. Hosted by UCD Energy Institute, NexSys brings together academics from nine institutions across the Island of Ireland (UCD, TCD, DCU, ESRI, Maynooth University, UCC, NUI Galway, Ulster University and Queen’s University Belfast) to work together to meet the unprecedented scale and complexity of the challenges associated with the energy transition.

We are looking for a PhD student to work for 4 years on a fully funded NexSys project in the Work Package “Travel behaviour shift for short & first and last mile trips”.

**Aims:** The Work Package will test the effectiveness and acceptability of behavioural interventions/strategies that target car users’ motivations to use low-to-zero emission modes and encourage car-shedding specifically for short distance trips and/or change contextual determinants of travel mode choices to nudge sustainable travel. Short distance trips arguably offer the greatest potential for mode shift away from private vehicles, thus this work will go beyond conventional engineering and economics thinking such as speed and time and examine the human attributes of travel. The potential impact of these behaviour change interventions will later be calculated using macroscopic transport models. The PhD Student will have the opportunity to join several research groups at UCD (NexSys, Civil Engineering, Behavioural Science and Policy, Environmental Policy) and will benefit from a vibrant research culture.

### Selection Criteria

The selection criteria outline the qualifications, skills, knowledge and/or experience that the successful candidate would need to demonstrate. Applications will be assessed on the basis of how well candidates satisfy these criteria.

**Tasks:** The PhD student will be involved in several collaborative activities, including: literature reviews; the design and execution of a behavioural field experiment (e.g. RCT) trialling a low-emissions strategies to achieve changed travel behaviour related to short distance trips (<5km); the design and analysis of travel diaries collected in the field experiment; interactions with UCD research groups and the larger NexSys team.

### Essential skills & experience:

- Candidates must satisfy the entry requirements for the PhD degree at UCD which includes the UCD Minimum Language Requirements and possibly visa requirements.
- A background in behavioural/ transport economics, behavioural science, environmental policy, public policy, or related fields.

- An MSc degree in a relevant area with at least an IE 2:1 honours degree (or its international equivalent).
- Ability to work independently and goal-oriented.
- Strong team player that will add value to an interdisciplinary team.
- Demonstrable motivation to conduct policy-relevant research.
- Willingness to travel and disseminate research results.

**Preferred skills & experience:**

- An interdisciplinary background in multiple relevant disciplines (behavioural economics, behavioural public policy, travel behaviour, etc.).
- Relevant experience of social science research on transport.
- Training in statistics and/or econometrics.
- Experience in using statistical programs used in the social and behavioural sciences (e.g., SPSS, Stata, Python or R)
- Experience in conducting field or lab experiments.
- Strong organisational, writing, presentation and other communication skills.

Supervision by Dr Páraic Carroll ([paraic.carroll@ucd.ie](mailto:paraic.carroll@ucd.ie)) and Dr Leonhard Lades ([leonhard.lades@ucd.ie](mailto:leonhard.lades@ucd.ie)). If you have questions, please get in touch with these researchers.

**Closing date:** Applications should be received no later than **23<sup>rd</sup> September 2022**, 5pm (Standard Irish Time).

**Application:** Apply by sending an email to [paraic.carroll@ucd.ie](mailto:paraic.carroll@ucd.ie) and use “PhD on travel behaviour change” as the subject of the email.

Include **one** PDF file with the following documents (in English):

- A cover letter explaining why you are applying for the position and what qualifies you for it;
- A current CV;
- Maximum three examples of work demonstrating prior achievement in research, enquiry or debate (e.g., a published paper or other work; software, standards or policy contribution; dissertation or master’s thesis);
- Where relevant, proof of English proficiency (please refer to: <https://www.ucd.ie/registry/prospectivestudents/admissions/policiesandgeneralregulations/generalrequirements/minimumenglishlanguage/requirements/>)
- Diploma and Transcripts of records (e.g. BSocSc/BA and MSocSc/MA).

After an initial screening, shortlisted candidates will be required to attend an online or in-person meeting.

**Starting date:** September 2022/ January 2023.

**Funding:** The PhD position includes paid postgraduate tuition fees and a tax-free yearly stipend (€18,500 per annum) for a period of 4 years. There is also funding for conference travel and for a PC/laptop and materials.

**Background:** In Ireland, private cars are the biggest contributor to transport emissions as they account for 40% of all transport emissions. An area with significant potential for emissions reduction in the car sector is to target short car trips. This project aims to study how psychological strategies identified in social and cognitive psychology as well as behavioural economics can be used to encourage car users to replace their short car trips by other modes of transportation, via collecting travel diaries of daily travel activities. The underlying assumption is that when people change their perceptions and beliefs, they adapt their behaviour accordingly. This is often done by changing the choice architecture and/or using timely interventions to disrupt the decision-making process. For such measures to be effective in the long term, they need to break travel habits and facilitate the internalisation of new habits. In order to support the just transition model, public acceptance and/or resistance of such interventions will need to be considered to determine social feasibility.

## Further Information for Candidates

### Equality, Diversity and Inclusion:

UCD is committed to creating an inclusive environment where diversity is celebrated, and everyone is afforded equality of opportunity. Diversity is highlighted in the university's strategic plan as one of the core values of UCD, and its EDI commitment is further demonstrated through the strategic objective relating to the attraction, retention, and development of an excellent and diverse cohort of students, faculty and staff. We welcome applications from everyone, including those who identify with any of the protected characteristics that are set out in our Equality, Diversity and Inclusion policy. The university adheres to a range of equality, diversity and inclusion policies. We encourage applicants to consult UCD's equality, diversity and inclusion policies here <https://www.ucd.ie/equality/>.

UCD's Equality, Diversity and Inclusion Strategy 2018-2020-2025 sets out the University's objectives aligned to UCD's ten equality grounds. [Link](#)

UCD's Vice President for Equality, Diversity and Inclusion chairs the University EDI Group which works across UCD's ten equality grounds in collaboration with College Vice Principals for EDI and EDI School Representatives. UCD's Equality, Diversity and Inclusion Unit supports the mainstreaming of EDI through the EDI Group and these roles and leads on the delivery of the EDI Strategy through a range of initiatives including policy development, awareness raising and training, internal and external relationship building, collation and analysing of data, establishing peer support groups and networks, attainment of accreditations such as Athena SWAN and supporting and promoting an environment of mental health and wellbeing and dignity and respect.



UCD has EDI staff networks which are a great opportunity to meet colleagues, network and engage with equality, diversity, and inclusion initiatives in UCD.

UCD's EDI Staff Networks include:

- UCD staff disability network
- UCD LGBTI staff network
- UCD Women@STEM
- Multicultural Employee Network UCD (MENU)

You can join UCD's EDI Staff Networks here: <https://www.ucd.ie/equality/groups/edinetworks/>

UCD is also engaged with the following initiatives:



### Athena SWAN at UCD

University College Dublin has received its second Athena SWAN Bronze institutional award in recognition of the university's work towards gender equality. To achieve this accreditation, an institution must demonstrate that it has undertaken a thorough self-assessment of gender equality challenges and has developed a detailed action

plan to tackle them. The [UCD Gender Equality Action Plan 2020-2024](#) was prepared by the [Gender Equality Action Group](#) and its Working Groups, in a process that involved external benchmarking, an EDI employee survey, focus groups and consultation across the university. It includes actions relating to recruitment, promotions, leadership, work practices, organisation and culture. The implementation of the Plan is already underway and includes mechanisms to track progress on each of the actions. This action plan includes the actions that arose from the review of the university's policy and procedures on Dignity and Respect.

### Age-Friendly University

University College Dublin is proud of its designation as an **Age-Friendly University** as part of the AFU Global Network. The principles of an Age-Friendly University are: To encourage the participation of older adults in all the core activities of the university, including educational and research programmes.

### University of Sanctuary

UCD was awarded **University of Sanctuary** status in 2018, (UoSI) is an Irish initiative to encourage and celebrate the good practice of universities, colleges and other education institutes welcoming refugees, asylum seekers and other migrants into their university communities and fostering a culture of welcome and inclusion for all those seeking sanctuary.

### Open Doors Initiative

UCD has joined a group of over 95 companies and NGOs, who work with government to create pathways to employment for marginalised people. These can be internships, scholarships, training courses, aiding entrepreneurs or full/part time employment, from a range of backgrounds and abilities.

These can be developed out on a bespoke basis with organisations to include specific projects. This group work with refugees, asylum seekers and migrants, people with disabilities and disadvantaged youth (including those from a traveller background, LGBTIQ+ etc).

They offer online training, mentorships, assisted learning, seminars, inhouse training for existing employees on a range of subjects and can assist with funding for training courses you run. They have ongoing meet ups with other companies and supporting partners who are working to create diversity and inclusion within their organisations.

More details are available on our website here: [www.opendoorsinitiative.ie](http://www.opendoorsinitiative.ie)

### Supplementary information

The University:	<a href="http://www.ucd.ie/">http://www.ucd.ie/</a>
UCD Strategy 2020-2024: Rising to the Future	<a href="https://strategy.ucd.ie/">https://strategy.ucd.ie/</a>
UCD Energy Institute	<a href="http://www.ucd.ie/energy">www.ucd.ie/energy</a>