

**“Energy, environment and us:
Circular economy and the role of citizens”**

**1st Energy & Environment Clustering Event
23-24 September 2019**

Hosted by Durham University

Ken Wade Lecture Theatre
Calman Learning Centre, Science Site
South Road
Durham, DH1 3LE, United Kingdom
#EUAenergy @DEI_Durham

PROGRAMME

The transition towards a carbon-neutral society or, preferably, towards a carbon-negative society requires the collective effort of all of us. It is now widely acknowledged that the Earth cannot sustain the pace at which its natural resources are being exploited and frequently converted into products that, even when they contribute to our well-being, are very difficult to reuse and recycle. At the bottom of the value chain for economical competitiveness and social prosperity lie the never-ending needs for affordable access to energy.

The targets set by the European Union (A Clean Planet for all, COM(2018) 773 final) and COP 21 (Paris Agreement, United Nations, 2015) regarding CO₂ emissions, energy saving and the use of renewable energies aim at speeding up a transition towards sustainability, and are directly related to the way we use natural resources to generate the energy that our societies need. University research and education have a key role to play in these endeavours, particularly in exploring new business models and citizen behaviours to achieve these goals. Collaboration between universities and businesses and with citizens is essential to ensure that the newly generated knowledge is put at the service of society.

In this context, what is the role of research, education and training? How can we find solutions for the social and technological challenges of the energy and climate transition? These are key questions which are going to be addressed at the 1st Energy & Environment Clustering Event, organised by the [EUA Energy & Environment Platform](#) (EUA-EPUE) and [Durham University](#).

EUA-EPUE connects universities across Europe to tackle the energy challenge through collaborative and interdisciplinary research, education and innovation to create a truly clean and sustainable energy system. As part of the [UNI-SET project](#) (2014-2017), the Platform developed two main documents: In

2016 a [Roadmap for European Universities in Energy](#) laid out a vision for a strategic agenda for universities and stakeholders in order to maximise their impact in the field of energy. In 2017 a strategic report [An Action Agenda for European Universities](#) provided a framework for universities across Europe to take initiative and develop interdisciplinary cooperation in the energy and environmental field. Early 2018 EUA-EPUE strategically broadened its perspective by integrating environmental aspects, to align with European and international targets towards sustainability.

Consequently, the Energy & Environment Clustering Events aim to support universities in addressing social and technological challenges of the energy transition and climate change. Building upon the “[Energy Clustering Events](#)”, this new series of events is addressed to university leadership, energy professionals and policy makers active in higher education and research in the field of energy and environment.

The [1st Energy & Environment Clustering Event](#) will focus on the engagement of consumers and citizen communities and on the transition to a circular economy. It will provide a platform for university leaders to share experiences in i) educating and training the next generation of master’s graduates and doctorates, ii) building research capacity within universities and other higher education and research institutions, or iii) strengthening interdisciplinary cooperation between universities and citizen communities, policy makers and industry/business.

MONDAY, 23 SEPTEMBER 2019

11.00-13.00 Registration

12.00-13.00 Welcome Lunch

13.00-13.15 Welcome Addresses

- Prof. Claire O'Malley, Pro-Vice-Chancellor (Global), Durham University
 - Dr Douglas Halliday, Chair of the EUA Energy and Environment Platform; Co-Director of the Durham University Energy Institute (DEI)
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13.15-14.15 Introduction: Science and Policy for the energy and climate transition

- Prof. Benjamin Sovacool, Professor of Energy Policy and Director of the Sussex Energy Group, University of Sussex

Accelerating energy and low-carbon transitions: Transitioning away from our current global energy system is of paramount importance. The speed at which a transition can take place—its timing, or temporal dynamics—is a critical element of consideration. This presentation therefore investigates the issue of time in global and national energy transitions by asking: What does the mainstream academic literature suggest about the time scale of energy transitions? Additionally, what does some of the more recent empirical data related to transitions say, or challenge, about conventional views? In answering these questions, the article presents a “mainstream” view of energy transitions as long, protracted affairs, often taking decades to centuries to occur. However, the article then offers some empirical evidence that the predominant view of timing may not always be supported by the evidence, and that accelerated transitions are possible under the right circumstances.

- Mr Haitze Siemers, DG Energy, Head of Unit “New energy technologies, innovation and clean coal” (tbc)

Chair: Dr Douglas Halliday, Durham University

14.15-15.15 New perspectives on university research, education and training towards energy and environment sustainability

This plenary will introduce the EUA-EPUE Platform and conference specific objectives. New perspectives for university research and education will be discussed, including the need for more interdisciplinary research and the development of new educational programmes.

- Prof. Linda Steg, University of Groningen, Faculty of Behavioural and Social Sciences, Environmental Psychology

One of the 'world most influential scientific minds' (Thomson Reuters ranking, 2017), Linda Steg is an expert in environmental psychology. She is especially interested in understanding which individual and situational factors affect intrinsic motivation to act pro-environmentally, with a focus on household energy use and car use. She is involved in various interdisciplinary research projects that aim to understand how to realise a sustainable energy transition. Linda Steg is a Lead author of the 2018 IPCC special report on the impacts of global warming of 1.5°C. She is a member of the Advisory Group on Energy for Horizon 2020 and of the scientific board of the Groningen Energy and Sustainability Program.

- Dr Douglas Halliday, Chair of the EUA Energy and Environment Platform; Co-Director of the Durham University Energy Institute (DEI)

Chair: Prof. Johan Driesen, KU Leuven

15.15-15.45 Coffee break

15.45-17.15 Universities as key actors in research, education and innovation towards the energy and climate transition

The parallel sessions aim at the sharing of experiences from institutional initiatives supporting and developing energy research and education activities relating to the integration of renewable technologies and solutions and resulting in significant steps towards the required energy and environmental transition.

Session 1 - Students engagement

- Mr Sam Cross, Aalto University: "Aalto Advanced Energy Project Course: A showcase of student and industry collaboration to solve business problems with societal impact"
- Dr Andrew Wright, De Montfort University: "Students Achieving Valuable Energy Savings (SAVES 2)"
- Mr Vebjørn Bakken, University of Oslo: "CityStudio Oslo: Student-City Interaction"

Chair: Prof. Linda Steg, University of Groningen

Session 2 – Interplay between education and research

- Ms Lien Van Schepdael, KU Leuven: "Digital education facilitating interdisciplinary research"
- Prof. Juan Jesús Pérez González, Universitat Politècnica de Catalunya: "Developing an educational environment to help lecturers and students for the transition to a new energy model"

- Prof. Maarten Arentsen, University of Twente: “Co-operative Education and Training formats: The BioEnergyTrain Experience”

Chair: Prof. Mihaela Albu, Politehnica University of Bucharest

Session 3 – Energy transitions at local level

- Prof. Sandra Bell, Durham University: “The Treasure Beneath Your Home: Public Inclusion in the Development of Geothermal Heat and Power”
- Prof. Barbara Koch, University of Freiburg: “Development of trinational systemic research and teaching activities on progressive concepts for region with renewable energies”
- Mr Connor McGookin, University College Cork: “A transdisciplinary approach to energy system modelling; Case Study on the Dingle Peninsula: Dingle 2030”

Chair: Prof. Fabrice Lemoine, Université La Lorraine

Session 4 – Engagement of stakeholders in education, training and research activities

- Prof. Tanja Winther, University of Oslo: “Establishing ‘INCLUDE’ as a transdisciplinary research centre on environmentally friendly energy in Norway: reflections on the process towards successful proposal – and some challenges ahead”
- Dr Maria Salaru, Durham University: “People-centered development: a collaborative approach to energy transitions”
- Prof. Gernot Stöglehener, Universität für Bodenkultur Wien: “Integrated Spatial and Energy Planning – From Idea to Implementation in the Austrian Province Styria”

Chair: Dr Wim Melis, Greenwich University

Session 5 – Transfer of knowledge in the transition towards a Circular Economy

- Prof. Jesus Rosales Carreon, Utrecht University: “Assessing sustainability implications of circular strategies within the building sector”
- Prof. Andriy Kytaiev, National University “Kyiv-Mohyla Academy” - NaUKMA: “Clean-Tech Clusters Development for Local Communities”
- Dr Karita Luokkanen-Rabetino, University of Vaasa: “Strategizing under highly regulated conditions: Lessons from university- waste refinery collaborations in the circular economy context”

Chair: Prof. Paulien Herder, Delft University of Technology

17.15-17.45 Report on the outcomes of the parallel sessions

19.00-22.00 Dinner

TUESDAY, 24 SEPTEMBER 2019

8.30-9.00 **Registration**

9.00-10.00 Innovation for sustainability and CO2 cycle – impact on citizens

- Prof. Mercedes Maroto-Valer, Robert M Buchan Chair in Sustainable Energy Engineering, Heriot-Watt University

Mercedes Maroto-Valer is an expert on the CO2 cycle. Her outstanding contributions, publication record and service to the chemical sciences and energy engineering have been recognised with numerous international prizes and awards. She has also been awarded a prestigious European Research Council (ERC) Advanced Award. Mercedes Maroto-Valer is the Director of the Research Centre for Carbon Solutions (RCCS), a world leading engineering centre developing novel solutions to meet the worldwide strive for energy. In her role as Assistant Deputy Principal for Research and Innovation at Heriot-Watt University, her key strategic responsibilities include leading the development of university wide initiatives to support global research activities, as well as development of strategic partnerships to support innovation. She also contributes to the development and successful delivery and implementation of the University's Research and Innovation strategy.

Chair: Prof. Fabrice Lemoine, Université de Lorraine

10.00-11.00 **World Café Session: “How to design consumer or community oriented research projects at universities” (in relation to energy/circular economy)**

The main objective of this session is to test ideas for the main topics addressed in Day 1. Participants will split into 5-6 small and informal working groups. The session is structured in two parts of 30 minutes each. Each group will have one moderator and one rapporteur. The moderators will invite the participants to brainstorm on selected questions.

11.00-11.30 **Coffee break**

11.30-12.00 **Report from the World Café groups**

12.00-13.00 Roundtable discussion “The role of consumers in the circular economy and energy transition”

The objective of this session is to translate the discussions into concrete steps in supporting the role of consumers in changing their energy consumption behaviour. Different actors engaged in that endeavour will participate, including policy makers, local authorities, university leaders, energy communities, industry.

- Adel El Gammal, Secretary-General, European Energy Research Alliance, Brussels (tbc)
- Prof. Johan Hustad, Trondheim Living Lab, Norway
- Professor Ahmed Khan, Chair Sustainable Architecture and Urbanism, Université libre de Bruxelles, Belgium
- Wouter van Bolhuis, Energy programme coordinator, Municipality of Groningen, the Netherlands
- Barbara Vest, Special Advisor and former Director of Generation at Energy UK, United Kingdom

Chair: Prof. Jon Gluyas, Executive Director of the Durham Energy Institute

13.00-13.15 Closing Remarks

- Dr. Lesley Wilson, EUA Secretary General
- Prof. Jon Gluyas, Executive Director of the Durham Energy Institute

Announcement of the [DEI Annual Research Symposium “Where Energy Meets People”](#) (10 Year Anniversary) on 25 September 2019

13.15-14.00 Farewell Lunch

14.00-17.00 Visit Durham energy and environment facilities
