

The Crest Of A Wave



The University of Hull's "Cresting" project is set to train 15 PhD students for careers in a wide range of research into the sustainability implications of the circular economy. Here, **Claire Lea** and **Pauline Deutz** explain more



A major new research project into the circular economy, led by the University of Hull, is getting underway. Funded by the EU Horizon 2020 programme as an MSC innovative training network, the project will be training a total of 15 PhD students for careers in a wide range of research into the sustainability (environmental, economic and social) implications of the circular economy. The project runs until December 2021.

Establishing a circular economy is a major policy area within the European Union and elsewhere. In 2015, a European Commission policy initiative was published, "Closing the loop – An EU Action Plan For A Circular Economy", which paved the way for further European policy developments to transition to a circular economy.¹

Explicitly seen as increasing economic competitiveness and laying a foundation for environmental employment, circular economy policies are designed to increase resource efficiency and decrease carbon dependency. As part of the Circular Economy Package, in January 2018 the European Commission adopted a new set of measures to transform Europe's economy to a more sustainable one.

There is significant activity in the circular economy area currently, by a range of stakeholders from policy-makers to organisations, as it is recognised that to be sustainable we need to transform the economy. There is also burgeoning research activity into how to promote a circular economy. However, the potentially far-reaching implications of the transition have not been examined.

Serious questions are raised regarding, for example, the implications for employment and training, not least in the

waste industry, and how to determine the optimal option for recovery for a given material in a given location. By addressing such critical questions, this project will form a part of the work to ensure that a transition to a circular economy is also a sustainable one.

Implications & Partners

"CRESTING" IS a partnership between the University of Hull, UK; Universities of Graz, Austria; Utrecht, Netherlands; Messina and University "G d'Annunzio" Pescara, Italy; Aberta and Nova University of Lisbon, Portugal; and the University of Technology Troyes, France.

This network drew on established working relationships, especially drawing on the International Sustainable Development Research Society (ISDRS) – an organisation whose conferences attract academics from across the globe with an interest in sustainable development beyond the confines of particular disciplinary approaches.

In order to consider the wider implications of the circular economy, the team brings together expertise from related areas, building in a range of interdisciplinary approaches and different national perspectives to bring depth and breadth to our understanding of the circular economy. Between us, we contribute expertise in supply chain governance, corporate social responsibility, life cycle analysis, sustainability indicators, environmental design, regional development, urban politics and waste management.

The four-year project also includes 15 partner organisations located in 10 different countries across Europe

and beyond. Partners include the Waste and Resources Action Programme (WRAP); Hull City Council; EMS Ltd (an award-winning Hull-based charity); the Dutch Ministry of Infrastructure and the Environment; and the Universities of Nanjing, China, and Ibadan, Nigeria. Other partners include companies involved in manufacturing, waste management and IT solutions for the circular economy.

The project is made up of a series of work packages (WP) designed to deliver the training and research elements of the project (work packages 1-5) and the governance, project management and engagement elements (work packages 6-9).

At the start of 2018, the project began. The first major task has been to recruit the 15 early stage researchers (ESRs). What this has highlighted to the project team is the tremendous interest and enthusiasm for the circular economy from a diverse range of disciplines and geographies. The ESRs are anticipated to start their roles by September 2018.

The project has now moved into the implementation phase, where the planning and activities mapped out during the development phase start to take shape. To support the projects core purpose and implement work package elements 6-9 we are developing a series of strategies (eg, a communication and dissemination strategy) and tools (such as reporting) to ensure the project meets its objectives effectively and we can share key learning to influence future policy development and circular economy activity.

The project team, using both internal and external expertise, has established a comprehensive programme of training and development to engage and inspire the ESR. To support this, an initial task for the ESRs will be to establish a programme of personal professional development, to ensure that they develop the skills and expertise needed to fulfil their research and to effectively contribute to the transition to a circular economy.

As part of the four-year project the ESRs will undertake research and, in addition, become experts in the circular economy, able to influence the transition to a circular economy beyond the four-year scope of the project.

The project broadly asks the following questions:

- to what extent are circular economy practices already occurring in public and private sector policy and practice?
- what are the environmental, social and economic implications of developing the circular economy, and how do these vary by scale (locally, nationally, and globally)?
- how can current circular economy practice be applied in different geographic/industry contexts?
- what methodologies of impact measurement and sustainability indicators can be developed for public and/or private sector organisations in the context of a circular economy?
- how can the circular economy in practice be understood beyond the policy and other aspirational definitions of the term?

The ESRs role will be to undertake research to establish answers to the questions and inform and influence future

thinking and developments for a range of stakeholders including policy-makers; business and industry ;and the public sector. All researchers will be spending time with one or more of the partner organisations to gain experience of working with circular economy practices and first-hand insight to the challenges involved.

Sustainability Impact

THE VARIOUS combinations of academic and professional expertise are designed to enable these projects to make a substantial contribution to both research and its

implementation. For example, expertise on private sector engagement with measuring product sustainability impact is combined with expertise on developing indices to measure the sustainability of public sector activities. Drawing on secondments with the Ministry of Environment in Lisbon and companies in Italy, these projects should bring new insights for reducing both public and private sector organisations' environmental impact, as well as increasing

understanding of how they can work together.

Other projects provide case studies of how aspects of the circular economy impact on different locations. For example, Hull and Lisbon will be used to compare not only the employment opportunities expected from resource recovery activity, but also consider how people in those locations respond to the opportunities.

The first networking event for the project will be a workshop in Hull in September, highlighting the perspectives of different organisations towards the circular economy, and identifying what they consider to be the major challenges. ■

Further details about the project are available at cresting.hull.ac.uk or follow the projects developments on Twitter @crestingITN.

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Reader in Human Geography in the School of Environmental Sciences, University of Hull, Pauline has more than 15 years' experience of research into policies and behaviours related to resource efficiencies. She is a co-opted member of CIWM's NE Centre council and vice president of the International Sustainable Development Research Society.

Reference

1. <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52015DC0614>