

Institution: Birmingham City University

Unit of Assessment: 16 Architecture, Built Environment and Planning

a. Context

The Centre for Environment and Society Research (CESR) has a distinctive approach to impact, focussed on the ongoing co-production of knowledge between researchers and policy and practice communities. This work champions transdisciplinarity, working at the built/natural environment interface, fusing the ecosystem approach with spatial planning, extracting lessons from experimental and innovative approaches to stakeholder engagement and running workshops/conferences to support contemporary policy challenges. Our research impact ranges from local (e.g. schools) and regional (e.g. Local Enterprise Partnerships, LEPs) to national (e.g. UK Peatland Code and National Ecosystem Assessment) and international (e.g. work in drylands and international adaptations of the Rufopoly game). We have long-standing relationships with professional organisations in planning and construction such as The Royal Institute of Chartered Surveyors (RICS) and the Royal Town Planning Institute (RTPI), with which the institution has worked for more than 55 years. Regionally we have forged strong partnerships with local authorities and LEPs and with commercial companies (e.g. South West Water) with whom we have collaborated on research projects.

We have championed a research method where academic, policy and practice communities work as one team throughout all stages of the research. We have created opportunities for engagement through: hosting knowledge exchange seminars for practitioners (e.g. on Building Information Modelling, and ecosystem services as part of RELU's Landbridge initiative); seminars and workshops for stakeholders (e.g. on the heritage of post-war reconstruction); and through our ongoing CPD and accreditation activity which gives us a route to construction and user communities nationally and internationally. Environmental management research has been strengthened through the recruitment of three researchers with a track record in research excellence with impact, opening new avenues for engagement with national and international policymakers. The appointment of Wakeford as a Visiting Professor has enabled stronger international links with our work given his recent role as chair of the OECD's Rural Working Group.

b. Approach to impact

During 2008-2013, CESR adopted more innovative approaches to maximising and delivering research impact within a framework of research excellence. Our impact strategy aimed to extend the reach of impacts across multiple sectors and end-users, with a primary focus on policy-makers and practitioners working in the built and natural environment (primarily in the UK). The goal was to deliver impacts of national significance, which could inform and influence decisions in policy and practice around the management of environmental and social change, and the governance of ecosystem services in the built and natural environment (with specific foci matching the evolving research interests of Centre staff, such as the Rural Urban Fringe and peatlands).

Impact has been delivered and assessed principally through the funded projects, and as inherent parts of such projects. Thus the research process itself became a shared and safe learning space in which new knowledge could be co-generated between researchers and the likely users of our work. For example, peatland research was conducted in close collaboration with Defra and Natural England, resulting in the UK Peatland Code being embedded as a central part of the Government's Payments for Ecosystem Services (PES) agenda. These projects have been successful in part because funding was used to facilitate impacts that were embedded into the research process itself. Furthermore, the Centre attempts to maintain and enhance these relationships after completion of the funded research through further collaborations and through joint publications and outputs in academic, policy and practice settings, for example ongoing informal collaboration with Defra to help review and implement the work on PES by jointly designing and running a national workshop to review their PES pilot programme, collaboration with NFU on a joint visit to Sweden to promote Rufopoly, the series of post-war reconstruction workshops, and online CESR Working Papers.

Our close and, in many cases, long-term relationships with members of the policy community and professional bodies in the planning, construction and business sectors provide

Impact template (REF3a)

regular opportunities to ensure that the latest research underpins policy decisions and professional practice in these sectors and gives us opportunities for exploring mutually beneficial research agendas. For example, CESR has strong relationships with key teams in Defra, Natural England, IEMA, Environment Agency, Welsh Government and Natural Resources Wales, for developing and implementing policy on ecosystem services. We have built strong collaborations with the Greater Birmingham and Solihull LEP, Birmingham City Council, and Localise West Midlands as part of their environment and social change agendas. We also have forged strong links with the professional bodies including the Chartered Institute of Building, Chartered Institute of Architectural Technology, RTPI and RICS, directly influencing the policy and professional practice of these bodies. This has led to a number of research projects funded by Defra and Natural England, and major contractors sponsoring PhDs in Building Information Modelling (Willmott Dixon) and construction project management (Sir Robert McAlpine). National and international links are fostered through organising professional research-led conferences (e.g. the 2012 UK/Ireland Planning Research Conference with RTPI; CIB Management of Construction conference 2012 in Montreal; and Associated Schools of Construction international conference in Birmingham, held for the first time outside North America).

To support the Centre's current impact activities, Birmingham School of the Built Environment has taken a strategic approach to the recruitment of new staff with substantial track records in research output and impact. The appointment of **Scott** (2009), **Carter** (2011) and **Reed** (2012) has significantly boosted the Centre's capacity to generate research impact. Stakeholder engagement is now a consistent part of our research project design and we have a strategy for publishing in professional, academic and popular media outlets ensuring that the research outputs reach as many people as possible. For example **Scott** regularly writes for the *Birmingham Post*. Through the work of **Reed**, a staff development programme was introduced in 2013 to further develop the skills our research need to engage in effective knowledge exchange for impact.

c. Strategy and plans

The Centre has an impact strategy to 2020 that is aligned with BCU's institution-wide approach to impact in its Research Strategy for the same period. The strategy encompasses training and skills, considers how to forge closer links with our existing industry partners and supports focused and effective dissemination and knowledge exchange activities. At its heart is a commitment to developing and maintaining long-term relationships with the users of CESR research, enabling us to consolidate and build upon impacts as opportunities arise, and giving us access to evidence that can help assess the reach and significance of our impacts.

At the core of our impact strategy is the need to learn lessons from our experience working with the users of our research. For example, our experimental and innovative ways of engaging policy and practice communities, and novel outputs such as Rufopoly and the EATME tree led to comprehensive user reviews being built in as part of the impact strategy for these projects. Furthermore, outputs and joint publications linking academics with authors from policy and practice help enrich both academic outputs and impacts. Good practice in knowledge exchange for impact has been extracted from this experience and been embedded in impact training for staff in CESR and elsewhere in the University, overseen by **Reed**. This training developed by **Reed** is delivered nationally across the Higher Education sector in collaboration with the Living with Environmental Change partnership. The course covers for example: principles for effective knowledge exchange, developing Pathways to Impact statements and knowledge exchange strategies, stakeholder analysis methods, social media for research impact and guidance on designing and facilitating events with research users.

A key part of CESR's impact strategy is to record impacts as they arise. CESR is leading work with BCU's Research, Innovation and Enterprise Services to share good practice and develop more sophisticated systems for capturing impact across the institution over the next REF period. All events, funding bids and unfunded work in CESR need explicitly to develop and implement impact strategies, and these are reviewed and enhanced through feedback via our research mentoring scheme. As part of this, there is an emphasis on working as closely as possible with as wide a range of stakeholders and research users, including for the more traditionally 'academic' aspects of our work such as planning history. This includes early identification of such stakeholders, recruiting them to projects as advisers or co-researchers, and where possible co-

producing research knowledge and outputs rather than using them only as a steering group or advisors (see, for example, work funded by RELU, Defra and Natural England).

d. Relationship to case studies

Both of our impact case studies demonstrate the Centre's novel approach to interdisciplinary policy challenges. The case studies demonstrate the leadership and vision of staff in managing complex and large research teams across disciplines, sectors and professions, championing methods based on co-production of knowledge and social learning to tackle complex resource management problems. Here the research process itself pushes participants outside their usual comfort zones in pursuit of outputs that deliver both immediate and long-term impact. The Centre has always sought proactive engagement with research users in defining research agendas that can tackle real-world challenges. The difference now is that the collaboration takes place throughout the research process with more users taking a more active and empowered role, and several of our PhD students are embedded in communities and companies working with them as part of their research. Research projects across our portfolio have recruited stakeholders to contribute directly to the research process as co-producers and co-investigators of knowledge, including contributing to innovative research outputs such as video policy briefs and games.

CESR's distinctive approach to impact is reflected strongly in each of our impact case studies. At the heart of our approach to impact is investing in long-term relationships based on trust, leading to the co-generation of knowledge between researchers and policy and practice communities. CESR's evidence-based approach to impact is also highly distinctive, and both case studies have implemented good practice in knowledge exchange for impact, arising from lessons extracted from CESR research on knowledge exchange. For example, in our "Fusing Spatial Planning with the Ecosystem Approach" case study, likely users of research were integrated into the research team in two projects funded by RELU and as part of the National Ecosystem Assessment, leading to the application of findings in a wide range of operational contexts. In the "Paying for Nature's Services" case study, a series of Defra and Natural England funded projects were built upon a long-standing collaboration based on former RELU funded work led by **Reed**, with substantial input from policy teams in Defra to jointly realise the production and launch of the Peatland Code. Both projects generated impact by using a range of innovative approaches to knowledge exchange, including the use of video policy briefs, a board game, music and smart phone apps.

Finally, each case study demonstrates how CESR has met its goals over the assessment period to extend the reach (across multiple sectors and end-users) and significance of impacts (influencing decisions in policy and practice around the management of environmental and social change, and the governance of ecosystem services in the built and natural environment). Both case studies demonstrate how CESR research has influenced policy and practice across multiple sectors within the built and natural environment, with a focus on the RUF and peatlands, with significant impacts on the practice of a number of organisations working in the RUF and Defra's PES policy area.