

Institution: Anglia Ruskin University
Unit of Assessment: UoA16 Architecture, Built Environment and Planning - Panel C
<p>a. Context</p> <p>Our research coalesces around the provision of sustainable solutions in architecture, the built environment and planning. The beneficiaries are spread across the sector from planners, through engineers and construction contractors to landlords and housing stakeholders. Research in the area of planning has impacted on the practice of spatial planners, raising their awareness of the critical factors that enhance well-being within an ageing society, particularly in urban environments, and especially the key parameters of familiarity and orientation in unfamiliar surroundings. We have changed the core management practice and policy of construction planners, construction contractors, building developers and managers involved in multi-use precincts and tourist resorts, both overseas and in the United Kingdom, because of our investigations into the range and efficacy of existing sustainability toolkits. Our engineers and surveyors have provided greater understanding of the properties, thereby encouraging greater use, of novel construction materials, through Finite Element Analysis and research comparing <i>in situ</i> behaviour of these materials. New development standards, now commercially available, have been produced by our researchers in collaboration with commercial bodies including EarthCheck Pty and construction standards have been influenced by our research. Finally, we have impacted on social landlords and housing stakeholders who have been able to reduce energy usage in social housing following our investigations into domestic energy usage patterns, which have also directly influenced occupants' behaviour change.</p>
<p>b. Approach to Impact</p> <p>The Unit is engaged with the supportive, strategic, and proactive University, Departmental and Faculty approach to achieving impact derived from the University's Research Impact Strategy. The approach of the Unit is to encourage staff to engage with key beneficiaries in the area of sustainability in a number of ways. This includes forming partnerships, disseminating research outputs and informing and developing practice across a range of built environment professional bodies. For example, the Association of Project Management provides a platform to disseminate our research findings. A further approach is to inform policy makers addressing housing challenges, an example of which is the Housing review undertaken with the Chartered Institute of Housing. Another example is the review of town planning policy and procedures in partnership with the Royal Town Planning Institute. An example of disseminating best practice in surveying includes development of an innovative mobile surveying tool disseminated, internationally, through the Royal Institution of Chartered Surveyors.</p> <p>The Unit adopts a carefully managed approach to its relationships with external clients. These relationships may be managed by the Faculty Commercial Manager and colleagues in the Research, Development and Commercial Services (RDSCS) office. The Unit works together with these colleagues to initiate research projects, and ensure their delivery, implementation and follow-through. The approach of the Unit to managing intellectual property and contractual matters relating to impact is to engage with the University Solicitor and the Secretary and Clerk's Office. To achieve maximum impact, the Unit disseminates its research widely through the Faculty and University Marketing teams. Additionally, the Unit supports colleagues by organising conferences at Anglia Ruskin and facilitating attendance at international conferences through which the research is disseminated to beneficiaries and stakeholders. The Unit strategically engages with writing retreats and mentoring to maximise the opportunity to disseminate research.</p> <p>The Unit accesses European Union funds through the strategic support of our European and International Research Funding Manager and through our in-house external funding specialists at Ixion Holdings. One example is our approach to the call of the European Union agenda item '<i>Challenges of an Ageing Population</i>'; the European Commission identifies that ageing populations pose major economic, budgetary and social challenges. The Unit's town planning research to improve the wellbeing of ageing societies, therefore, is being developed to impact upon this internationally recognised need. Impact is achieved by translation of the research from the University into the practice environment both overseas and in the UK.</p>

Examples where the Unit has achieved impact by adopting the above approaches include:

- Through the Institution of Structural Engineers, designers were informed of the criticality of simultaneous corrosion, loading, and overloading of structural elements.
- Hampshire County Council has changed its practice on purchasing and contract procurement. As a consequence of this, the 'South East Seven Civil Engineering Framework Agreements' changed the way that the Hampshire Association of Local Councils managed contracts valued over £100M.
- The Royal Town Planning Institute (RTPI) UK & Northern Ireland Planning Research Conference raised spatial planners' awareness of key drivers of well-being in an ageing society. Town planners from on a multi-faceted consortium of Town Planners, the RTPI, the Welsh Assembly, Colchester Borough Council, Castleoak Care Partnerships, Age Concern Cymru, Swansea Network 50+, Swansea U3A and Clinical Research Collaboration Cymru were informed on sustainability in urban environments.
- An EU FP7 project "Design of new acoustic absorbers for thermal mass buildings" This project, running to 2014, includes SME partners Nowofol (Germany), Acoustic RPG (UK), DeAMP (Norway) and Skelly and Couch (UK). The impact of the project is to provide solutions around more efficient passive energy use and improved sound attenuation within buildings.
- The development of a refined sustainability framework for sustainable tourism facilities which is now commercially available as the Precinct Planning Design Standard (PPDS, see http://www.earthcheck.org/media/78264/earthcheck_ppds_flyer_8102013_2.pdf). This standard has provided a systematic solution for developers following configuration, testing, validation and subsequent exemplification through the Thai Government and through presentation at end-user focussed international conferences.

c. Strategy and Plans

The Unit's impact strategy is rooted within the Department of Engineering and the Built Environment's research strategy. This in turn reflects the Faculty research strategy which supports Anglia Ruskin University's Research and Scholarship Strategy (2012 – 2014) within which is embedded the University's Impact Strategy. Our unit impact strategy specifies targets to ensure research-role clarity, optimum sharing of good practice and engagement of new staff in research. Targets aim to improve and develop the research profile of the Unit, ensure it provides a valuable contribution to the corporate objectives of the University, and optimises positive impacts upon a sustainable built environment. These strategies are informed by the 'Concordat for Engaging the Public with Research'; the University has recently signed the NCCPE's Manifesto on Public Engagement in recognition of its support. To be revised twice yearly, the Unit's Research Impact Strategy focusses on the identification and engagement with built environment sustainability practice in the UK and overseas. Specifically, its main objectives are to:-

1. Grow key relationships. We will enhance existing partnerships to ensure ongoing impact on their activities. We will engage with visits from and to collaborators, existing and new and grow the portfolio of research beneficiaries;
2. Grow income with particular focus on Knowledge Transfer Partnerships (KTP) and Low Carbon – Knowledge East of England Partners Partnership (Low Carbon KEEP) projects to achieve impact through the Faculty Commercial Manager and the newly employed RDCE KTP managers;
3. Ensure there is follow through from research to market and that key stakeholders are actively involved in bids for research funds nationally, internationally and with a focus upon the European Union;
4. Increase the offering of research-based CPD/short courses, aiming to achieve impact on companies who are end users of our applied research by up-skilling their staff through bespoke training;

5. Target specific industries for taking our research to the market place by, for example, organising and hosting research conferences and outreach events;
6. Support and encourage staff to engage in public debate to promote our research through the media.

d. Relationship to Case Studies

The two case studies exemplify the Unit's approach to impact. They illustrate targeting of sustainability through the best use of physical resources; achieving collaboration with external partners, and measuring, modelling, changing and then reflecting upon social and economic needs.

Case study 1: Enhancing national and international spatial planning policies to improve the independence and quality of life for older people.

This study, in line with Unit practice, involved engaging with key research institutions and professional bodies. Through such engagement we inform and influence their practice. The work was disseminated through the 2010 National Planning Conference hosted by the Unit with marketing and outreach facilitated by Faculty specialists. The dissemination activities and publications reflect the Unit's strategy to raise the Unit's International profile. It informed the Unit's approach to impact by verifying that inter-institutional collaboration enhances capability.

Case study 2: A dynamic development route-map that enhances sustainable construction, improves project efficiencies, and reduces environmental impact,

This study demonstrates how project management concepts can enhance commercial and ecological benefit in developing economic scenarios by adopting informed standards. Targeting the Far East and Australia, the Unit funded and supported four international conference papers reaching non-academic user groups. The Unit engaged our International Funding Manager and International Office to initiate negotiations with stakeholders and new potential markets. This demonstrates the Unit's strategy to disseminate theoretical research, via practical case study research, for the benefit of sustainable development worldwide.