# Institution: University of East London



#### Unit of Assessment: 16

#### a. Context

Our submission to UoA 16 comes from researchers within UEL's School of Architecture, Computing and Engineering (ACE). Although the Unit is small, it conducts research across a range of architecture and built environment-related fields, particularly through its Sustainability Research Institute (**SRI**). Work on the SRI's three core areas of research - 'Biodiversity and Environment', 'Material and Practice', and 'Public Realm' - is carried out primarily by the Environmental Research Group (**ERG**) and Place Research Lab (**PRL**). The work of both groups is characterised by a focus on a combination of academic and non-academic learning activities, workshops, consultation and project delivery. They also share an inclusive and often participatory approach to research, developed through professional practice and via mutually beneficial working relationships with nonacademic research users.

Work on our 'Biodiversity and Environment' theme (Lindsay, Connop and Kadas) has been conducted in, and itself led to, productive partnerships with a range of quasi-governmental, governmental and intergovernmental planners, by whom it is used to support the management of the UK's natural environment, biodiversity and ecosystem. The research has also been used by commercial organisations such as Aggregate Industries to explore the feasibility of waste resources exchange and re-use. Significant EU funding through the TURaS project supported our production of practical guidance on sustainable development, based on collaboration with a number of international businesses. Our 'Material and Practice' research links Chandler, Fretton, Segantini and Scott-Whitby in articulating knowledge derived from and tested within architecture practice. Key insights are shared widely: local, national and international policy-makers and decision-making bodies have engaged with award-winning buildings resulting from our research such as 'New Conservation' (Chandler) and 'Water filtration in the Veneto' (Segantini) - to shape innovative strategies for building development and conservation. Our communication of expertise in areas such as material and construction innovations has supported disaster relief development with international NGO's and charitable foundations such as the Institute for Sustainability and Article 25 in Burkina Faso, Haiti, and the Niger Delta. 'Public Realm' work by Clarke, Karthaus, Minton, and Pace articulates qualitative and political aspects of urban life, developing innovative platforms for communicating and evaluating the sustainability of the urban realm. Work in this area has involved designing and managing collaborations between local and international partners such as the US Green Building Council to work on local environment analysis tied to public space and sustainable neighbourhood planning (Karthaus, Clarke). Local partners and beneficiaires have included Design for London, The London Mayor's Office and local Authorities in Camden, Newham, Southwark, and Westminster. The London Mayor's 'Manifesto on Public Space' put Minton's published research into direct practice in opposing private ownership of public space within new urban developments.

# b. Approach to impact

Non-academic impact is integral to the Unit's research agenda, which emphasises the application of a critical and rigorous approach to address the practical problems faced by our external partners and other non-academic users, particularly in industry and policy-making organisations. **SRI** focuses on the cultivation of relationships that facilitate **knowledge transfer**; many of its researchers are also **practitioners**, for whom research and impact are different facets of the same activity. The group encourages and facilitates external collaboration as a means of effecting knowledge transfer, partly through its **flexible**, **client-focussed research approach**. Herein, methods are adapted to best meet the specific situational needs of the client in order to maximise the value of: our work, particular briefs and projects, and to broader policy outcomes.

**Commissioned research** constitutes an important cornerstone of our approach to realising and maximising non-academic impact, particularly in terms of ensuring the relevance of our work in meeting specific partner needs. Examples of commissioned research conducted since 2008 include our delivery for the <u>Commission for Sustainable London (CSL)</u> of a peer review of the Olympic Scheme. This built on SRI's previous development of an Olympic Games Impact Study for the Olympic Delivery Authority (ODA), which provided guidelines for integrating appropriate

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changes to maintain the long-term viability of the new development. The reach of the impacts of this work on both planning policy and implementation will be expanded internationally by its use as a reference data point for the Rio de Janeiro Olympiad. The Unit's 2012 <u>Manufactured Aggregate</u> <u>Research Centre (MARC) project</u>, funded under the ENTRUST Landfill Tax Credit Scheme from the RMC Environment Fund, demonstrates the further significance of **collaborative work** to our capacity to deliver important non-academic impacts. In this instance, SRI worked with RTAL Ltd (Hong Kong) and Trefoil Technology Ltd (UK) to produce a toolkit for creating Cradle-to-Cradle business and innovation sites, guidance on finance models, operational good practice and technical advice for industry use in Europe. The relations founded with industries through this and other projects have been further strengthened through **business and industry funded scholarships and PhDs**, including with TFL and Aggregate Industries.

We also seek to engage the public in our research itself including, for example, through our annual 'Live Project' Workshop Programme, which involves community-based research in projects designed to influence and improve community environments. The spectrum of partners and clients benefitting from these sorts of community-based participatory research and dissemination projects span local communities and Schools (Newham, Camden, Westminster); local Councils and policymakers (Borough, Newham, Tower Hamlets); international NGOs such as Article 25; charitable foundations and private clients. Encouraging the involvement of our end users and beneficiaries at every stage of the research design, implementation and communication, again helps us to ensure that our work best reflects and responds to the changing needs of those end user communities. The 'Live Project' workshop programme is supported by staff practitioners (notably Clarke, Scott Whitby, Pace, Chandler, Karthaus), who apply the same approach within their practice (e.g. Clarke's Altab Ali Park for 'High Street 2012'). Since 2008 the Unit has also fostered numerous research partnerships with HEIs beyond the UK, supporting diversity and pluralism within the research community and maximising localised non-academic collaborative opportunities. Our partners include the Universidad Finis Terrae - Santiago (UFT); Venice (IUAV); Kazan (Kazan State University of Architecture and Engineering); St Petersburg (SUACE); Akmi University (Athens), and Guangzhou University in China. These have allowed us to deliver extra-academic impacts, for example through the 2012 China UK Challenge (CUKC), which encourages new business ventures between China and the UK. The CUKC is intended to simulate the real-world process of entrepreneurs soliciting start-up funds from early-stage investors and venture capital firms, including the largest national non-governmental organization of scientific and technological workers in China (CAST).

Alongside collaborative and commissioned research, the group uses its expertise in **coordinating large co-research projects involving non-academic partners** both to create opportunities for new impact-generating projects, and to maximise the impacts of the collaborative projects to which we contribute. This approach helped ensure our involvement in the <u>'Transitioning towards Urban</u> <u>Resilience and Sustainability'</u> (TURaS) project, a five-year, €6.8m EU funded scheme set up in 2012. TURaS brings together a total of 28 European partners (9 Higher Education institutions, 11 local authorities and 8 SMEs) with urban communities and businesses to develop sustainable solutions to the challenges of climate change, natural resource shortages and rapid urban growth. SRI's contribution to the project, which is led by *Newport* and *Connop*, focuses on a number of key research themes, including leading on policy guidance for innovative 'Green Infrastructure'.

**Consultation activity** and staff engagement with **influential advisory boards and committees** providing expert advice to policy-makers and other organisations constitutes another significant channel for our transfer of research insights and expertise to both policy-making and practitioner audiences. *Chandler* was invited to develop the award winning 'New Conservation' project in Chile based on his RIBA standing as an expert in building conservation, leading to policy influence with the Chilean Government around the conservation of national monuments (see case study UEL16-02). *Minton* has provided policy reports for the RIBA, Demos, the Joseph Rowntree Foundation, CABE and the homeless charity Shelter. *Lindsay* was a specialist scientific advisor for IUCN at the 'UK Peatland Program Commission of Enquiry'; this led to the IUCN running the DEFRA sponsored event at COP10 Convention of Biological Diversity (Nagoya, Japan 2010) and, in turn, to the development of learning resources including the IUCN Field Guide as catalogues for partner organisations (see UEL16-01).

Public engagement is likewise key to the our approach to impact, especially in terms of our

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capacity to improve awareness and understanding of our research itself and of associated social and environmental issues among as wide a non-academic audience as possible. We employ a **multi-media approach** to extend the reach of public engagement with both the written and physical outputs of our work. That approach incorporates our development of and / or contribution to live events and exhibitions, including at international galleries, museums and festivals. Recent examples include exhibitions at the Venice Biennale, MIT, Milan Triennial, M van Museum in Leuven, and ArkitekturSalon in Stuttgart. We also contribute to discourse about topics relating to our research in both radio and television broadcasting. *Minton*, for example, contributed to BBC Four Thoughts' 'Fuelling Fear with High Security' programme. Where appropriate, we use online and digital media to further extend the reach of our engagement with non-academic audiences. This has included the recent redevelopment of our own website to ensure its provision of more - and more accessible - information and learning resources (<u>www.uelarchitecture.org</u>).

The communication of key research insights to non-academic audiences is also a central feature of our approach to engaging and delivering benefit to practitioners. Our activities in this sphere include **organising and running professional development and training workshops for practitioners** as a means of sharing our research with local, national and international audiences of architects, planners, and academics. *Karthaus* is a jury member of <u>Les Ateliers workshops</u>, a non-governmental organization that gathers universities, decision makers and professionals dedicated to planning, development and urban design. In that role, he has contributed to workshops on the production of urban proposals and on strategic direction for practitioners in China, Europe, Russia and India. He also worked with French Architect Florence Bougnoux and the Les Ateliers team as the Science Director of an EU-funded professional urbanism workshop in the new city of Naya Raipur (population 560,000), which took place in November 2012. In 2013, the SRI was asked by the RIBA to host their regional architecture group to lead professional CPD events, bringing students and practitioners together.

### c. Strategy and plans

We plan to build on the most successful facets of our practice-oriented collaborations, hands-on approach and inclusive approach to public, policy and practitioner engagement' and in particular, to focus on further strategic development in the following areas:

1. **Strengthening transnational networks with non-academic partners**, including by encouraging further cross-disciplinary and cross-institutional collaboration. Examples will include the use of our 'Leadership in Energy and Environmental Design Neighbourhood Design' (LEED ND) research under Roland Karthaus in collaboration with the USGBC, to develop GPS and APP interactive tools to provide qualitative data to augment and enhance urban analysis.

2. Increase and enhance public engagement with our research. We plan, initially, to focus on enhancing the use of our 'Live Projects' platform as an interface between researchers and community groups and members, and to extend the reach of that engagement to international communities. In 2014 a 'live project' collaboration with IUAV, architects and networks in the Veneto (*Segantini, Pace*), will use 'instant ateliers' within former industrial neighbourhoods to develop and build socially inclusive interventions in Venice.

3. **Increasing our involvement with building awareness** projects to influence policies tied to socio-political and environmental sustainability, and encouraging the public to be conscious of the users' role in the design of the built environment, including through participatory activities tied to design commissions (2014 Folkestone Triennial). A peer-reviewed journal - 'Issues' - will be set up to communicate key research insights with extra-academic partners; the editorial board will be Chaired by Tony Fretton.

# d. Relationship to case studies

Both submitted case studies demonstrate the value of various strands of the approach to impact outlined above, including our **development of multi-organisational networks** as a route to delivering non-academic impact at local and international levels. UEL16-01 highlights Lindsay's delivery of impacts through **commissioned reports for policy-makers** and his **membership of important strategic and advisory boards**. UEL16-02 demonstrates the importance of our **professional expertise** to our capacity to deliver impacts, again partly through our production of commissioned research and information resources distributed widely among policy-makers and practitioners, as well as being available to a general public audience.