

PROFESSOR STEFFEN LEHMANN

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ACADEMIC PROFILE

Professor Dr Steffen Lehmann is professor of sustainable architecture and Founding Director of the interdisciplinary Cluster for Sustainable Cities at the University of Portsmouth (United Kingdom), a research group that brings together over 38 key researchers across a wide range of disciplines.

See: www.city-futures.org.uk

and the personal website: www.city-leadership.com

He has held a number of senior administrative posts in 4 countries, including: Head of School of the large SOBE School, Founding Director of two flagship research centres at the University of South Australia (UniSA), and most recently: Director of the Cluster for Sustainable Cities.

Over recent years he has taken on more of a leadership and mentoring role for Early Career Researchers as well as increasing administrative responsibilities and research leadership.

Prior to his appointment in the UK, Professor Lehmann was a tenured Chair and full Professor for 13 years in Australia (from 2002 to Nov. 2015). He has led the implementation of the strategic renewal of the research and teaching areas of a large School and established university-wide research centres. At UniSA, he also led the China engagement of the university and was Director of the China-Australia Centre for Sustainable Urban Development, a joint centre with Tianjin University.

He has over 30 years' experience in sustainable urban design and architecture, living and working in Asia, Australia, Europe, the UK and the USA. Steffen was a consultant to Rio Tinto (Australia) and an External Advisor to UNESCO and UN-ESCAP on sustainable urban development. He has advised over a dozen cities on the subject of sustainable architecture and urban design, including Berlin, Shanghai, Singapore, Sydney, Melbourne, Adelaide, Abu Dhabi, Ho-Chi-Minh City and Helsinki.

He trained as an architect in Germany and at the Architectural Association School of Architecture in London (AA Dipl. 1991), before completing a PhD (Dr.-Ing.) in Architecture and Urbanism at the Technical University in Berlin.

After 30 years as registered practising architect and over 15 years as a full Professor of Architecture (tenured Chair), Steffen is at the forefront in the development of new perspectives on the transformation potential of neighbourhoods and districts to become more sustainable, resilient and socially inclusive.

He has published widely in journals and invited to contribute chapters to books or reports, internationally. His Google Scholar h-Index is 18 and lists over 1.400 citations, see: <https://scholar.google.com/citations?user=yJ2eBpsAAAAJ&hl=en>

The contribution and international standing of his expertise in Green Urbanism was acknowledged in 2009 with an invitation from Earthscan/Taylor & Francis publishers to publish

an authored book on green urbanism (*The Principles of Green Urbanism*, London/New York, 2010), and to be the editor of a new book series.

ACADEMIC QUALIFICATIONS

2003 PhD in Architecture & Urbanism (Dr.-Ing.), TU-Berlin
1991 AA Dipl., AA School, Architectural Association, London
1988 Dipl. Des. (Arch & Des), Univ of Appl Science, Mainz – equal. to Master's
1985 Vor-Dipl. Des. (Arch & Des), Univ of Appl Science, Trier – equal. to Bachelor

PUBLICATIONS

Steffen is an acknowledged pioneer of 'Sustainable Cities' and in what has become known as Green Urbanism. His seminal book 'The Principles of Green Urbanism' (Earthscan, 2010) has developed a new framework for designing, developing and evaluating sustainable urban projects.

In 2012, he was awarded as Principal Investigator (PI) a large grant (\$1.5m) under the CRC-LCL programme for the collaborative research on 'Urban Micro-Climates Research: Comparative Study of Sydney, Melbourne and Adelaide', a large interdisciplinary study of the urban heat island effect which included over 20 project partner. See: <http://urbanclimates.org/prof-steffen-lehmann/> Publications from this research are included in his extensive publication list.

Steffen Lehmann is book series editor of the Series on Sustainable Design for Routledge (London/New York). Information on his book series is here: <https://www.routledge.com/Earthscan-Series-on-Sustainable-Design/book-series/EARTHSD>

In a research career that spans the last 25 years, Steffen has published 18 books, over 50 invited book chapters and over 300 articles and papers. Between 2006 and 2014, he was Editor-in-Chief of the US-published *Journal of Green Building*. He is currently an editorial board member of 5 academic journals. His papers and books have been translated into a number of languages including German, Spanish, Chinese and Italian.

In July 2017, his new book 'Growing Compact' (co-edited with HP Bay; Routledge, 2017) was published by Routledge. His book series has received numerous positive reviews.

For more information on his publications, see:

<https://www.amazon.co.uk/Steffen-Lehmann/e/B0034PYAVS>

In 2016, he published 'Sustainable Lina' (co-authored with A Condello; Springer, 2016), which explores the adaptive reuse projects of important architect Lina Bo Bardi.

In 2015, Steffen Lehmann published 'Low Carbon Cities. Transforming Urban Systems' (Routledge, 2015). This key publication examines the theoretical underpinnings for the required shift in the process of city transformation and includes numerous case studies.

PUBLIC SPEAKING AND INVITED LECTURES

Steffen Lehmann delivered over 80 invited keynote addresses in 40 countries. Podcasts of his TEDx presentation and UN-HABITAT Urban Global Lecture are online. See:

<https://unhabitat.org/steffen-lehmann-transforming-the-city-towards-low-carbon-resilience/>

He has presented at more than 450 conferences in 40 countries and lectured at the top architecture schools in the world, including lectures at:

- Architectural Association School of Architecture – United Kingdom
- Delft University of Technology – Netherlands
- University of California, Berkeley – United States
- Harvard University – United States
- University of Oxford – United Kingdom
- National University of Singapore – Singapore
- Tsinghua University and Tongji University – China
- Hong Kong Polytechnic University – Hong Kong
- Polytechnic University of Milan – Italy
- Technical University Munich – Germany
- Technical University Berlin – Germany
- The University of Sydney and University of New South Wales – Australia
- The University of Melbourne – Australia
- KTH Royal Institute of Technology – Sweden
- Technical University Vienna – Austria

VISITING PROFESSOR POSITIONS

In 2009, Steffen was appointed as DAAD Professor at the Technical University of Munich, a prestigious position funded by the Deutscher Akademischer Austauschdienst (Germany).

He currently holds a Professorial Fellowship at UTS's Institute for Sustainable Futures (ISF) in Sydney, 2016-18; and a Visiting Professor position at ANU in Ahmedabad, India, 2017-18.

International engagement – Steffen held Visiting Professor positions at the following institutions:

- Arts Academy Berlin-Weissensee (1997-1998)
- Tongji University, Shanghai (2003)
- Technical University Berlin (2005)
- National University of Singapore (2009)
- Technical University Munich (2009)
- University of California at Berkeley (2012)
- Tianjin University in the P.R. of China (2014)
- UTS, Sydney, Institute for Sustainable Futures (2016-18)
- ANU Ahmedabad, India (2017-18)

He has been an External Examiner for PhD theses at leading universities, including the University of Sydney, the University of Western Australia, Monash University, Bond University, and Hong Kong Polytechnic University.

CURRENT RESEARCH AND ONGOING PROJECTS

Over the last 20 years, Steffen Lehmann served in different senior leadership roles, establishing new research centres, building teaching quality and driving impactful research activities.

He has been in research intensive leadership positions for the last 10 years. During this time, he has had significant responsibility for creating and leading new urban research formations. He has exploited these opportunities with distinction generating a large publication and granting output and a continuous stream of successful research students.

Steffen's track record of publications is evidence for sustained scholarly contributions and advancement of knowledge in the relatively young research field of 'sustainable urbanism'.

He is an internationally renowned thought leader in the field of sustainable architecture and urban design principles, exploring our complex relationship with nature, technology and place. Most of his own research projects are design-architecture-engineering nexus based, concerned with the integration of low-carbon and low-impact technologies in architectural design and the social/behavioral and urban context.

Steffen's current research interests include:

- Resilient urbanisation for low carbon compact cities and coastal resilience
- Green urbanism theory - Scenarios for the *City of the Future*
- Resource-efficient construction: infill using modular off-site manufacturing
- Urban culture and new programmes for age-friendly public space
- Sustainable architecture and smart high-performance buildings
- Climate-responsive design and technology integration
- History & theory of cities, urban renewal and cultural heritage
- Research on the optimisation of urban density and compactness

LEADING INTERNATIONAL RESEARCH COLLABORATIONS

Steffen has previously lived and worked in Berlin, London, Tokyo, Berkeley (USA), and Australia, experiencing a very broad range of practice methods and research approaches. He is an experienced leader of change - strategic, operational and cultural - with an ability to develop, communicate and deliver a compelling vision to a range of internal and external stakeholders.

Over the last years he has managed and implemented an immense programme of change, transforming and repositioning the large School of Built Environment as a research-led and future-ready powerhouse (with an increased research output by 36% pa). Steffen has demonstrated a strong capacity to engender and lead collaboration between the research, industry and policy communities, and to foster research that anticipates and responds to policy necessities, and provide high quality advice to urban leadership.

RESEARCH LEADERSHIP AND GRANTS OBTAINED

Steffen has attracted large funding in grants, and as Founding Director of two research centers and the Cluster for Sustainable Cities was managing research projects of the value of over \$7 million in grants and contract research. The impact of his work has influenced corporate behavior, municipal policies and legislation.

In 2017, he was awarded as Principal Investigator (PI) a large grant (US\$2m) under the Belmont Forum - JPI Urban Europe programme for 'CRUNCH: the Food-Water-Energy Nexus', an international interdisciplinary project with 20 partners from 6 countries.

In 2012, he was awarded as Principal Investigator (PI) a large grant (\$1.5m) under the CRC-LCL programme for the collaborative research on 'Urban Micro-Climates Research: Comparative Study of Sydney, Melbourne and Adelaide', a large interdisciplinary study of the urban heat island effect which included over 20 project partner.

The research activities of the Cluster are grouped around five interlinked matters of conceptual and empirical concern, see the research programme here: www.city-futures.org.uk

The research agenda of the Cluster has been enhanced through the development of connections with industry partners, local government and international leading scholars across the social sciences and humanities, engineering and the visual arts.

The Cluster for Sustainable Cities brings together an interdisciplinary group of over 38 researchers with an interest in resilient urban futures to develop a trans-disciplinary approach to scaling-up urban innovation for low-carbon living, working, leisure and mobility.

Steffen's research interests span architecture, urban design and sustainability with a strong focus on improving the environmental performance of buildings and neighbourhoods by introducing the concept of 'integrated urban climate resilience'. These themes are brought together in his most recent books published with prestigious publishers, Routledge and Springer.

He has recently created and commenced large multi-disciplinary research projects, in collaboration with other leading researchers in the field of sustainable cities, for instance developing the following projects:

- 'CRUNCH – Operationalising the Food-Water-Energy Nexus'
- 'RESTORE – Nature-based Solutions for Restoring Damaged Ecosystems' (H2020)
- 'INSIGHT – Urban Regeneration Leadership for Chinese Cities' (Newton Fund)
- 'INTERFACE – Mobility and New Types of Public Space'

Most of these were large, international, interdisciplinary research projects (e.g. H2020), involving the application and/or development of the innovative green urbanism design and planning techniques he has been developing for over 20 years.

Having been **Founding Director of 3 successful research centres**, he leads large multi-disciplinary research teams and projects, for which he provide mentoring, coaching support and team building.

- Inaugural Chair holder, UNESCO Chair for Sustainable Urban Development for Asia and the Pacific (2008-10)
- Founding Director, Centre for Sustainable Design and Behaviour, UniSA (2010-14)
- Executive Director, China-Australia Centre for Sustainable Urban Development, UniSA (2010-14)
- Founding Director, Innovation Cluster for Sustainable Cities, University of Portsmouth (2016- to date)

"I am committed to the efficient use of land, compactness, polycentrism, high-quality public space, mixed uses and appropriate density, through urban infill or regeneration strategies to trigger economies of scale and enhance resource efficiency. Our Research Cluster is particularly interested in the relationship between architectural form and performance; and in developing low-impact and low-energy construction systems and solutions across the entire project life cycle." -- **Steffen Lehmann**

AFFILIATIONS, MEMBERSHIPS AND LEARNED SOCIETIES

Steffen has had many professional affiliations and is currently a member of:

- Member, Royal Institute of British Architects (RIBA), UK (2016 to date)
- Invited Academician, Academy of Urbanism (AoU), UK (2016 to date)
- Member, Royal Australian Institute of Architects (RAIA) (2003 to date)

Other memberships included:

- Member, Architektenkammer Berlin
- Member, Bund Deutscher Architekten
- Member, UNESCO Chair in Sustainable Urban Development, Advisory Board
- Member, Australian Institute of Urban Studies
- Member, Zero Waste Centre Advisory Board
- Member, Executive Board, Barbara Hardy Institute, UniSA
- Chair, China-Australia Centre for Sustainable Urban Development Advisory Board
- Member of the UN working party for preparations of HABITAT III
- Member, UN ESCAP Expert Group 'The New Urban Agenda'
- Member, Humanities Management Board, Curtin University
- Member, Australian Deans of the Built Environment and Design
- Member, Coastal Cities Network, Research Group, UK
- Member, Developers Group, Shaping Portsmouth, UK

PUBLICATIONS IN HIGH-RANKING INTERNATIONAL JOURNALS

Some of his articles have become the most downloaded or most cited article of the journal. Articles were published in the following journals:

Journal of Sustainability; Journal of Sustainable Development; International Journal of Logistics Systems and Management; Greenbuilding; Singapore Architect; Domus; Bauwelt; Challenges; Habitat International; Next American City; Stadt:Pilot; Journal of Green Building; Journal of City, Culture & Society; Journal of Cleaner Production; Journal of Sustainable Cities & Society; International Journal of Development and Sustainability; Journal of Urban and Environmental Engineering; The Fifth Estate, Science for Environment Policy; Supply Chain Management: An International Journal; International Journal of Logistics Systems and Management; Landscape Architecture Frontiers; International Journal of Waste Resources; Cleantech; City Economics Wirtschaft Stadtentwicklung; The Conversation; The Adelaide Review; ArchitectureAU; Eco-Business; InDesign; Timber+Design International; Sustainable Development, Law & Policy; Keio SFC Journal; Waste Management & Research; Business Magazine; Building Design BD-Online; and others.

TEACHING: SUPERVISION OF POSTGRADUATE RESEARCH

Steffen Lehmann welcomes expressions of interest from suitably qualified individuals who would like to pursue Doctoral level or Masters level research in the areas of his interest.

PhD Supervision: He has successfully supervised a variety of interdisciplinary PhD studies as Primary Supervisor (since 2003) in the field of sustainable architecture, urbanism, design theory and socio-technical change. He is happy to discuss proposals with potential PhD candidates that connect to his field and are interested in exploring open-ended questions.

He has been an External Examiner for PhD theses at leading universities, including the University of Sydney, the University of Western Australia, Monash University, Bond University, and Hong Kong Polytechnic University.

The students he has supervised have also been highly successful, receiving awards for their PhD research and securing academic positions.

"I am passionate about the possible urban futures of our cities and our capacity to rethink urbanism to enable principles of social and environmental sustainability. That passion extends into my research, teaching and collaborative practice."

-- Steffen Lehmann

TEACHING EXPERIENCE AT ALL LEVELS

He has been teaching postgraduate and undergraduate students in architecture and urbanism since 1991, advising PhD students since 2003. He has also been involved in teaching through various workshops and visiting appointments at leading institutions worldwide, including at the TU-Munich, NUS Singapore, UC Berkeley, Tongji Shanghai and numerous other top universities. He has taught advanced design studios together with Harry Seidler, Hans Hollein, Arata Isozaki and other eminent architects.

In 2008, in recognition of my significant contributions and academic leadership in the design studio, he was awarded the Award for Teaching Excellence (at the University of Newcastle, NSW). Current teaching includes:

- Postgraduate (PhD) thesis supervision;
- Advanced research training and research methodologies;
- Advanced urban design: short studios, guest lectures and crits;
- Guest lectures on architectural design theory and sustainable city design.

REVIEWER OF MAJOR FUNDING APPLICATIONS

Over the last 14 years, Steffen has regularly been appointed as assessor for international research proposals and large grant applications. For instance, he has been appointed by international funding agencies as an external assessor:

- European Commission, Brussels, for Horizon 2020 (as Expert Evaluator and Rapporteur)
- EPSRC, UK Research Council, for Global Challenges Fund
- Swiss National Science Foundation, Bern
- Canada Foundation for Innovation, Ottawa
- Japan Society for the Promotion of Science, Tokyo
- Research Grants Council of Hong Kong, SAR Hong Kong (regularly since 2012)
- Earth Watch Institute, Massachusetts, USA
- UNESCO, Higher Education Sector, Paris
- Australian Research Council, Canberra, as Excellence in Research (ERA) Peer Reviewer and as regular ARC Grant Assessor for large grants (regularly since 2008)

MEMBER OF INTERNATIONAL AND NATIONAL DESIGN COMPETITION JURIES

Over the last 15 years, Steffen has served as jury member for international, national and state awards for organisations, such as the Senate of Berlin, the Royal Australian Institute of Architects, the Australian Housing Industry Association and other bodies. He has been appointed to serve on design juries for:

2013	Siemens Green Technology Journalism Award 2013, Asia-Pacific Region, Singapore
2011–12	'The Zero Carbon Challenge', Adelaide (appointed by LMC, SA Government)
2010	'Hub-2-Hub', Singapore (appointed by the Urban Redevelopment Authority, URA)
2009	'Harmony Point', HoChiMinh City (appointed by Municipality of HCMC)
2007	National Urban Design Awards 2007, Housing Industry Association (HIA), Sydney

- 2006 BlueScope Steel Glenn Murcutt Student Prize 2006
2005–06 'Etihad Towers', Abu Dhabi (appointed by H.H. Sheikh S. Bin Moh'd Al-Nahyan)
2005 'Wedding Pavilion', Brisbane Roma Street Parklands (appointed by Qld Government)
2004 Queensland State Awards of the Royal Australian Institute of Architects (RAIA)
2000–01 'Leipziger Platz', Berlin (several competitions, appointed by Senate of Berlin)

“Buildings, places and neighbourhoods are always designed in team work. They need to be enjoyable, resource-efficient and work well over time. This means that they have lasting qualities and make a positive contribution to their context and user-experience. Each of my projects begins with a clear strategy and evolves from there, it never begins with a pre-conceived design solution.” -- Steffen Lehmann

LEADERSHIP IN PROFESSIONAL PRACTICE

He has a long and distinguished career as an architect and urban designer (with an impressive track record as a practising architect and policy adviser) and likes to combine practice with research and teaching.

With his own design practice, STEFFEN LEHMANN ARCHITEKTEN GmbH and the s_Lab, he was actively involved in the 1990s architectural creation of the 'New Berlin'.

The s_Lab (Space Laboratory for Architectural Research and Design) was a research office founded by Steffen Lehmann in January 1993 in Berlin to combine research, teaching and practice. In parallel, he established the commercial architectural office to build projects. He was privileged to be able to design and built significant large-scale (public and private) projects in historically significant cities and places, such as at Potsdamer Platz (with Arata Isozaki) and at Hackescher Markt in Berlin.

The s_Lab in Berlin was an interdisciplinary studio employing around 20-25 staff, based on the belief that architecture can deliver very important innovations for the city. In the 1990s, the s_Lab was an adventurous team of architectural designers, architects, researchers, planners, digital craftspeople, urban ecologists and model-makers, delivering a construction budget of \$900mill in 20 projects. As lead architect on large urban developments, Steffen adopted a large practice approach in regard to systems thinking and the value of research-informed projects. He is currently working on innovative housing projects in Berlin and Stuttgart (Germany), and in Australia.

Between 1990 and 1993, as a young architect, he first worked with visionary architects Arata Isozaki in Tokyo and James Stirling in London, before establishing my own practice.

His project clients included over 30 notable institutions such as: the Bundesverband Deutscher Banken, the Auswaertige Amt (German Ministry of Foreign Affairs), Deutsche Bahn AG, the Berliner Volksbank, Daimler Immobilien, Deutscher Gewerkschaftsbund (German Workers Union) and numerous others he has represented - with entities as diverse as the Senate of Berlin, the Republique de France, Manhattan Loft Corp and the City of Sydney.

His work has been exhibited at important international venues, including AEDES Gallery in Berlin, Deutsches Architektur-Museum, the Bauhaus in Dessau, and at the Architectural Association in London.

“Throughout my career, I was privileged to work on numerous high profile projects: I designed and built significant projects in historically important places, such as at Potsdamer Platz, Hackescher Markt and Pariser Platz in Berlin, generating lasting public value for cities and high-profile clients.” -- Steffen Lehmann

CURATOR OF MAJOR EXHIBITIONS

He has a long-term interest in urban culture, the city and public space, and was the initiator and curator of major interdisciplinary exhibitions in urban space and galleries, with 3 books published as catalogues of these exhibitions, including:

- ‘Rethinking: Space-Time-Architecture’, Berlin (catalogue published by Jovis, Berlin)
- ‘Absolutely Public’, Brisbane (catalogue published by Images Publishing, Melbourne)
- ‘Back to the City’, Newcastle (catalogue published by Hatje Cantz, Stuttgart)
- ‘Hidden Networks: Laneways by George’, Sydney
- ‘Hub-2-Hub’, Singapore.
- Curator for exhibitions at AEDES Gallery and Eigen + Art Gallery, Berlin