

Speaker biographies and presentation synopses

Keynote talk: Toward an Ecological Civilisation: Vision and Principles

Jeremy Lent, Author of *The Patterning Instinct*, www.jeremylent.com

Friday 7 June | 11.45 – 12.45

In the face of climate breakdown and ecological overshoot, promises of “green growth” are not enough. We need to restructure the fundamentals of our global cultural/economic system to cultivate an Ecological Civilisation that prioritizes the health of living systems over short-term wealth production. This presentation assesses the full scale of our ecological crisis and reviews the rare historical precedents for the full-scale cultural/economic transformation currently required. It describes the foundational philosophy and principles of a life-affirming Ecological Civilisation and offers some specific examples of what such a transformed system might mean in practice.



Jeremy Lent is an author whose writings investigate the patterns of thought that have led our civilization to its current crisis of sustainability. His recent book, *The Patterning Instinct: A Cultural History of Humanity's Search for Meaning*, explores the way humans have made meaning from the cosmos from hunter-gatherer times to the present day.

He is founder of the nonprofit Liology Institute, dedicated to fostering an integrated worldview that could enable humanity to thrive sustainably on the earth. His upcoming book is *The Web of Meaning: Integrating Science and Traditional Wisdom to Find Our Place in the Universe*.

Plenary session: 30 years of building solutions to the climate crisis

Pete Warm and Sally Godber, *Warm Low Energy Building Practice*

Friday 7 June | 13.45 – 14:30

Speaker biographies and synopsis to follow.

Workshop: Reducing carbon emissions in the built environment

Friday 7 June 14:30 – 15:30

University of Oxford's Carbon Reduction Programme

Harriet Waters, *Head of Environmental Sustainability, University of Oxford*



Harriet Waters is Head of Environmental Sustainability at the University of Oxford, a position she has held for the past 6 years. Prior to that she was Sustainability Manager at Oxford Brookes University for ten years so environmental sustainability in Oxford has occupied much of her career over the last decade or so.

At the University of Oxford, Harriet manages the team that support the University's environmental sustainability policy. The teams' main areas of work include carbon reduction, building more sustainably, transport, environmental legislation compliance, waste management and biodiversity. She is a cyclist, local food fan and reuse app collector.

The Circular Economy

Paola Sassi, *Oxford Brookes University*

The circular economy applied to the built environment advocates a closed loop resource system where potential waste from one building becomes the resource for another building. This approach aims to move away from a linear resource system associated with waste going to landfill and encourages the cooperation between industries to reduce waste and resource use, including energy. This session outlines the current state of the art, including case studies applying the principles and systems and standards being developed. In particular the potential for carbon emissions reductions and methods to encourage the adoption of circular economy principles in the building industry are discussed.



Dr. Paola Sassi teaches and undertakes research at Oxford Brookes University and the Oxford Institute of Sustainable Development. Previously she taught at the University of Nottingham, Cardiff University and the Centre for Alternative Technology in Wales. She has more than 30 years of architectural practice experience and as partner of Sassi Chamberlain Architects was responsible for a number of shortlisted and winning designs competitions and experimental developments including sustainable urban communities, two ultra-low energy closed loop material cycle flats in Cardiff and a Victorian terrace refurbishment achieving 80% reduction in heating requirements.

Dr. Sassi researches, publishes and has been invited internationally to speak about her work in the field of sustainable communities, design for deconstruction and closed loop material cycles, ventilation in ultra-low energy homes and motivations for adopting sustainable lifestyles. She is the author of 'Strategies for Sustainable Architecture', shortlisted for the RIBA International Book Award 2007.

Workshop: Making Ecological Civilisation Real: Practical Steps Toward Transformation

Jeremy Lent, Author of *The Patterning Instinct*, www.jeremylent.com and Elizabeth Ferguson, Founder, *Climate Compassion*, www.climatecompassion.org

Following on from Jeremy's earlier presentation (see above biography and synopsis), this workshop will interactively explore the question of what it will take to make an Ecological Civilisation a reality:

- How can the turbulence of our current crisis be transformed into a leadership opportunity?
- How can the vision of an Ecological Civilisation be applied to practical steps on a daily basis?

The workshop will invite you to explore the practical expression of the principles of Ecological Civilisation in your own work, and introduce practices of ecological leadership, providing skills to transform the challenge of climate breakdown into an opportunity for growth and vision.



Elizabeth Ferguson, Ph.D. is founder of Climate Compassion, dedicated to advancing compassionate action for ecological and social flourishing. She has recently initiated an action leadership cohort to face into the climate emergency, weaving together climate action, psychosocial resilience, spiritual practice, and regenerative adaptation. She holds a doctorate in Transpersonal Psychology, and consulted to leading tech companies in Silicon Valley for over a decade in Usability Research. She is a facilitator and coach, certified in Permaculture Design and Leadership Embodiment Coaching. As a member of the International Transformational Resilience Coalition she is working to build large-scale psychosocial resilience ahead of climate breakdown.

Workshop: 30 years of greening homes

Friday 7 June | 14.30 – 15:30

Past and future practice changes

Lucy Pedler, *The Green Register*



Lucy is an architect with 35 years of professional experience and has particular expertise in sustainable building practices. For five years Lucy worked as a Product Specialist and Seminar Coordinator at the UK's first Ecological Building Centre, researching the environmental impact of building materials and systems and creating seminars for construction professionals.

Lucy created The Green Register in 2000, now a nation-wide networking and educational not-for-profit organisation promoting sustainable building practices to all disciplines of the construction industry.

In 1999, Lucy started her own sustainable architecture practice, archipeleco, designing buildings that have a low impact on the environment. In 2005, Paul McWilliams joined archipeleco and Lucy and Paul then started a new company: develeco limited that transforms derelict properties into sustainable, beautiful and affordable buildings fit for 21st century living.

Lucy is an RIBA member, was nominated as an Earth Champion in 2015 and is on the panel of the Bristol Urban Design Forum.

Past and future policy changes

Jon Bootland, *Chief Executive, Passivhaus Trust*

2019 will see the 10th anniversary of the UK's first Passivhaus, the world's leading low energy building standard. During that time, the Passivhaus Trust has helped to encourage delivery of over 1000 Passivhaus buildings. Jon will outline the successes from the first ten years and highlight what progress we might make in the next ten.



Jon Bootland is Chief Executive of the Passivhaus Trust, which is the official body for promoting and protecting the Passivhaus standard in the UK.

He is also an Associate Director at the National Energy Foundation (NEF), and has helped to establish the Good Homes Alliance (GHA), the Sustainable Traditional Buildings Alliance (STBA) and the Alliance for Sustainable Building Products (ASBP).

Where are we with the Good Homes Alliance?

Julian Brooks, *Network & Programme Manager, Good Homes Alliance*

Speaker information to follow

Plenary talk: Achieving zero: Delivering future-friendly buildings

Dr Brenda Boardman, *Environmental Change Institute, University of Oxford*

Saturday 8 June | 09.40 – 10.20



Brenda has been at the Environmental Change Institute, University of Oxford, since 1991 and is now retired and an Emeritus Fellow. She has focused her research on fuel poverty since the 1980s and published her second book on the subject, *Fixing Fuel Poverty – challenges and solutions*, with Earthscan in 2010.

Brenda's wider research looks at energy in the built environment, always from the perspective of the user. Her publication, *Achieving zero – delivering future-friendly buildings* came out in 2012 and considered the policies required to get all energy, in all UK buildings to zero carbon emissions by 2050, primarily through demand reduction.

Workshop: Health & wellbeing

Retrofit and health

Kate de Selincourt, *Journalist*



Kate de Selincourt is a journalist and researcher specialising in sustainable building and building performance. She is a regular contributor to *Passive House Plus* magazine, where she has investigated topics such as the performance of natural and mechanical ventilation, the use of communal heating in low energy buildings, and retrofit both good and terrible, and she has also examined some of the background factors contributing to the disaster at Grenfell.

Building a Healthy Home

Akta Raja, *Enhabit*



Akta is founder of Enhabit, who designed and delivered the first two residential passivhaus retrofits in the UK, one of which has won the CIBSE award for energy efficient project of the year. Since then, Enhabit has worked on more than 400 low energy projects, retrofit and newbuild. Enhabit has recently expanded to include capabilities in Norwich and the Midlands.

Akta is also a Non-Executive director of the Royal Free NHS Foundation trust and a qualified solicitor.

Earth friendly refurbishment

Sally Marieke



Sally's interest in sustainable building stems from her MSc Architecture: Advanced Environmental and Energy Studies, from the Centre for Alternative Technology (CAT), Wales. Sally's intentions are to help increase the knowledge and provision of healthier buildings, to re-skill society for a future without fossil fuel and to reduce CO2 emissions through low-impact, natural construction techniques.

In 2014 Sally was joint founder of Building Naturally Ltd, promoting the use of natural materials in construction. As a potter, she naturally connected with clay in construction and has trained in clay plastering (Erasmus funded) and is the Membership Executive of Earth Building UK and Ireland. Currently Sally works as a studio potter & teacher; a fundraising assistant and teacher of practical earth building skills at the Sustainability Centre, East Meon; and as an assistant for practical earth building skills to Masters students at CAT.

Workshop: Ventilation & air tightness

Saturday 8 June | 10:20 – 11:20

PAS 2035 Ventilation

Alex Baines, *Design Buro*



Alex is a member of the BSI Retrofit Task Group as part of the Bonfield Review tasked with identifying and delivering new British Standards, including PAS 2035. Now tasked with developing the scope for a new BS on Human Comfort, Ventilation, Indoor Air Quality, Overheating and Air Tightness. This will eventually feed into or replace the new PAS 2035 and other PAS and BS standards. Currently Technical and Project Lead on a BEIS retrofit research project.

His standard work is as a Passivhaus consultant and Air tightness expert on a number of new build projects or refurb projects such as Wilmcote House, as well as his own Passivhaus self-build.

Pitfalls in Passivhaus airtightness

Paul Jennings, *Aldas & Liam Schofield, LGS Airtightness*



Delivering airtightness is the most challenging part of most Passivhaus projects, particularly in refurbishment.

Between them, Paul & Liam have nearly 20 years' experience of designing, testing and delivering airtightness on newbuild and refurbishment Passivhaus projects in the UK. This includes the first certified PH projects in Machynlleth and the UK's most successful EnerPHit project, Erneley Close in Manchester.

Key pitfalls of the airtightness process are discussed and the appropriateness of EnerPHit refurbishment questioned.

Natural ventilation - reducing costs and improving comfort

Joe Miles, *Atamate Building Intelligence Ltd*

All ventilation systems aim to maintain a good indoor air quality while minimising excessive heat losses. Benefits of natural ventilation systems are reduced cost, simplicity of installation, less internal noise and a reduced risk of summer overheating. Unfortunately they tend to be uncontrolled, increasing heat losses.

This talk will investigate the use of demand control ventilation (DCV). DCV incorporates the benefits of natural ventilation but with reduced heat losses. When considered as part of a building services strategy, DCV can provide lower installation and running costs, while providing the highest comfort levels.



Joe read environmental engineering at university and subsequently qualified as a chartered engineering. He has run construction and property development companies for the last 25 years in both England and Wales. He has a wealth of experience in designing and specifying low energy buildings, with a focus on mechanical and electrical systems as these are critical to the efficient functioning of buildings. Specifying and installing appropriate controls ensures the comfort and security of occupants, reduces energy consumption and reduces the cost of building management and maintenance. Joe is the founder of Atamate Building Intelligence, a control platform for low energy buildings.

Workshop: Ecosystems / holistic approaches

Saturday 8 June | 10:20 – 11:20

Living building challenge

Barbara Jones, *StrawWorks*

Speaker information to follow

Urban green infrastructure and ecosystem services

Alison Smith, *Environmental Change Institute, University of Oxford*



Alison's background is in energy and climate policy, but she now works as a researcher in the Environmental Change Institute at the University of Oxford.

Her work focuses on developing and testing practical methods of mapping and measuring green infrastructure and the ecosystem services it provides for people. She sees nature-based solutions and green infrastructure as having a strong role to play in tackling the climate and biodiversity crisis and providing multiple benefits for human well-being.

Elmsbrook – One Planet Living

Nicole Lazarus, *Head of One Planet Living, Bioregional*

Bioregional Oxfordshire supported the development of the UK's first eco-town North West Bicester, from 2010 to 2017, through a long-term partnership with lead developer, A2Dominion, and the local authority, Cherwell District Council. It is the only development to be built to the original high sustainability standards outlined in the UK's official government Eco Towns Planning Policy Statement (PPS) 2009. The development has been created using the One Planet Living framework and principles and even has its own action plan and community of residents committed to making the development into a One Planet Community. Join Nicole as she explains the process of creating Elmsbrook, and how One Planet Living was implemented on this highly ambitious development.



In her 22nd year at Bioregional, Nicole leads Bioregional's One Planet Living initiative, offering resources and support around the world for partners serious about sustainability. She has a particular focus on One Planet cities and regions, leading the One Planet Oxfordshire pilot in partnership with the county council and many local stakeholders. As One Planet Living goes digital, with the launch of new company Oneplanet.com, she is responsible for delivering a programme of training for One Planet Integrators and a system of Peer Review so that the best possible learning and knowledge sharing can take place.

She further sits on the Board of the multi-million pound Ox futures II programme, funded by ERDF to grow Oxfordshire's low carbon economy and oversees the brilliant new endeavour to set up Oxfordshire Greentech, the business network for a low-carbon Oxfordshire.

Plenary talk: Islam & Sustainability: from green initiatives in Birmingham to Ecovillages in Tanzania

Kamran Shezad, *iHelp Global*

Saturday 8 June | 11:50- 12:30

An exploration of how faith plays a role in promoting sustainability and the protection of the environment. This plenary talk will focus on the Islamic faith and highlight case studies of mosques in Birmingham using theological teachings to promote sustainable consumption.

The talk will also highlight the pioneering faith-inspired Eco Village in Tanzania as a unique approach to ecological upbringing and empowerment of communities.



Kamran is a qualified environmental specialist with practical field and managerial experience in sustainable development extending over 17 years. He is a strong advocate of empowering communities to guide behavioural change to promote the message of environment and sustainability. He holds a master's degree in Environmental Sustainability (Strategy & Management), is a chartered environmentalist, and a full member of the Institute for Environmental Management & Assessment (IEMA).

Kamran holds the sustainability portfolio for the Bahu Trust and is Climate Change Advisor to the Mosques & Imams National Advisory Board (MINAB)

Workshop: Commercial case studies

Saturday 8 June | 12:30 – 13:30

St Sidwell's Point: A Case for Passivhaus & Building Biology in Leisure Buildings

Giles Boon and Jonathan Barattini, *Gale & Snowden Architects*

St Sidwell Point is setting a new benchmark for high performing, low energy and healthy buildings in the UK. Currently under construction, this globally recognised Passivhaus development is set to deliver a state of the art new leisure centre encompassing three pools, 150 station gym, exercise studios and roof top spa. How this leisure centre came about, its ambitious client brief, design development and now on site delivery will be revealed by its Client and Passivhaus design team. St Sidwell's Point is probably a global first in its delivery of a Certified Passivhaus, healthy (Building Biology) and climate ready Building.



Giles is a Certified European Passivhaus Designer and Chartered Technologist at Gale & Snowden Architects. He is an experienced thermal bridging analyst providing support for airtight and thermal bridge-free design across Gale & Snowden's commercial and housing projects. Outside Gale & Snowden, he lectures on the Architectural Technology and Design programme at the University of the West of England to inspire the next generation of low-energy building designers.

Drawing upon his experience, his role at St Sidwell's Point is centred in the preparation of technical designs for the external envelope of the building. Currently, his involvement is in managing the practice's design information for the project, providing support to the wider design team and taking on board input from the contractor's supply chain.

As part of the team at Gale & Snowden, his work is pivotal in resolving the technical challenges faced in applying the Passivhaus Institute's performance targets to a complex, multi-zoned commercial building.



Jonathan is a project architect with Gale & Snowden Architects, with a passion for low-energy, healthy buildings that respond to their landscape and which integrate occupants into their surroundings. He has been involved in the delivery of pioneering Passivhaus schemes for local authorities across the south west of England, including multi-residential flat and housing developments.

Building on experience gained from multiple projects over 10 years, construction methods have evolved, incorporating the innovative use of materials aimed at reducing delivery programmes, enhancing collaboration with contracting teams and optimising building performance for future climate scenarios.

Jonathan's latest project completed with Exeter City Council is Chester Long Court, a Passivhaus certified block of 26 flats constructed using monolithic clay blocks which are hygroscopic and help to regulate internal humidity. The development provides exemplar healthy living conditions based on Building Biology principles featuring: non-toxic, organic and easily cleanable materials and surfaces; excellent air quality; high levels of thermal comfort and daylight; and good wiring design and specification to minimise electromagnetic radiation.

Emma Osmundsen, *Managing Director, Exeter City Living Ltd*



While at Exeter City Council, Emma has championed the Passivhaus standard for 10 years delivering over 100 passivhaus affordable homes across the city to date.

The City Council is currently constructing the UK's first certified Passivhaus leisure centre and Extra Care Home village with completion scheduled later in 2020.

All of Exeter City Council's new developments are certified Passivhaus, Climate Ready (to 2080) and healthy (incorporating Building Biology in the Design).

Last year Emma launched the City Council's wholly owned private development company, Exeter City Living Ltd which has an extensive pipeline of passivhaus projects many of which are open market homes.

Emma is a Trustee of The UK Passivhaus Trust, Chair of Constructing Excellence South West and Non Exec Director of YMCA England & Wales.

Workshop: Retrofit case studies

Saturday 8 June | 12:30 – 13:30

A building process story for Enerphit - Carlton Chapel House: a typical 80's building retrofitted

Fran Bradshaw, *Anne Thorne Architects*

What processes and qualities do we need for Enerphit to work for these many late 20th century buildings around us? Technical design and how to achieve airtightness have rightly come first, but procurement and commissioning: how we follow through the building process, is also important. The retrofit of a 1980's London block of flats, designed for and still owned by a Housing Co-op, is the case study of a project commissioned by far-sighted clients.



Fran Bradshaw has been working since 1996 with Anne Thorne Architects, a women's firm exploring participatory design, and sustainable architecture /places through practice.

Recent projects include new Passivhaus housing for London Borough of Lambeth, a strawbale and timber Ecohub for Lordship Park regeneration, and working with residents and community groups on the low energy Enerphit retrofit of an 80's block of flats for a Housing Co-operative.

Founder member in 1981 of Matrix Feminist Design Collective, which pioneered a participative approach to designing with community groups, and joint editor contributor to 'Making Space, Women and the Man Made Environment'. Since 2013 Trustee of the AECB

OWLs/BEIS - Scaling up retrofit

Sarah Price, *Enhabit*

Scaling up retrofit – Sarah will be presenting two research projects in, both with the aim of developing an affordable, deep retrofit system for low and high rise domestic buildings. The first project was a three year Innovate UK funded project, completed in 2016 (Coventry Uni, Beattie Passive, Solihull Community Housing), and the second a BEIS funded project that is currently underway (Oxford Brookes, Beattie Passive, Enhabit, Design Buro and Great Yarmouth Borough Council). Both projects use an external insulation system to retrofit a block of 6 flats to near EnerPHit levels, with tenants in situ. Ventilation is installed in the insulation layer to create an EnergieSprong type approach.



Sarah has experience of working on a wide variety of projects related to energy in the built environment from concept through to commissioning, in 2011 she wrote the city wide energy strategy for Birmingham City Council and has been involved in the certification of over 100 Passivhaus dwellings over the past 8 years. She is a specialist in the technical performance in buildings including thermal bridge analysis, energy modelling, moisture, MVHR and has a deep understanding of the relationship between different building performance standards in the UK from Building Regulations to Passivhaus. She is a Trustee of the AECB and sits on the UKCMB technical working group for retrofit. She is the editor of, and a tutor for the new Level 5 Retrofit Coordinator Diploma developed in line with the new standard on Retrofit in Buildings being developed by the BSI – PAS 2035.

Supporting quality retrofit in the RMI sector

Aneaka Kellay, *Carbon Co-op*



Aneaka has worked for over three years in the retrofit team at Carbon Co-op. She has managed projects on householder engagement and training, energy justice and is currently involved in supply chain engagement and training.

She has over ten years of experience working in environmental organisations and co-operatives, and has a Masters in Environment, Politics, and Globalisation. She is experienced in hosting workshops, facilitation and community engagement.

Workshop: Residential new build

Saturday 8 June | 12:30 – 13:30

Building a contemporary home

Charlie Luxton, *Charlie Luxton Design*



Charlie Luxton is passionate about sustainability and architecture. He has spent the last 20 years designing sustainable buildings and making television programmes about architecture and design. This combination of doing and talking is what Charlie is all about. Charlie is interested in creating architecture fit for the 21st century; designs that respond to local materials, traditions and climate.

He is the principle of Charlie Luxton Design (CLD), an architecture firm of eight that specialises in sustainable buildings. They are working on large variety of projects ranging in type and scale but always seeking to deliver architecture to the highest standard. CLD always begin the design process from people and place; the client and the site. There is no set style to their work, it's from here that their architecture grows.

Performance gap in new build housing

Rajat Gupta, *Oxford Brookes University*



Professor Rajat Gupta is Director of the multi-disciplinary Oxford Institute for Sustainable Development and Low Carbon Building Research Group at Oxford Brookes University, where he also holds professorial chair in sustainable architecture and climate change.

He developed the RIBA award-winning DECoRuM model for carbon mapping communities. Rajat's research interests lie in evaluating building performance from a socio-technical perspective, local energy mapping, and scaling up energy retrofits. As Principal Investigator he has won over £10 million in research grants to investigate these subjects.

Presently he is lead academic on a BEIS thermal efficiency innovation grant (T-cosy) and Co-Investigator on £13.8 million Innovate UK funded smart local energy demonstrator (Local Energy Oxfordshire) and £8 million EPSRC funded Energy Revolution Research Consortium. Rajat has published widely, including strategic journal papers on future direction of energy demand research and evaluation of an innovative energy retrofit programme.

Building to AECB Standard

Alan Budden, *Eco Design Consultants*



Alan likes nothing more than to combine his Architectural skills with his environmental knowledge to develop houses into fun, healthy, ecologically sound, low carbon homes. Alan is a Chartered Architect, and Certified European Passivhaus Designer. Alan started Eco Design Consultants in 2008 by combining his experience of housing, modern methods of construction & environmental design. He was the architect for Stewart Milne's Sigma Home, at the BRE innovation park in Watford and designed one of the UK's most airtight house for Milton Keynes Parks Trust. He also enjoyed his role as sustainability lecturer for students of Architecture at Birmingham University.

Plenary talk: AECB: 30 years of building for the future

Nick Grant, *Elemental Solutions* and Alan Clarke

Saturday 8 June | 14:30 – 15:30

Nick and Alan will look back over the last 30 years of AECB people and projects, picking out some highlights. They are speaking at a time of day when older AECB members like to have a little lie down these days so we will try and keep it lively. They will then ask, what did we learn, and what do we do now?



Nick Grant is an engineer working mostly on Passivhaus buildings. He is largely self-taught and approaches problems with beginner's mind, or ignorance, depending on your view.



Alan Clarke is an energy consultant and building services engineer specialising in Passivhaus design. After working for many years in this field he is still enjoys solving new problems, but realises we've actually solved a few already.