

# With thanks to the Steering Group:

Alasdair Ben Dixon, Collective Works Ian Taylor, Feilden Clegg Bradley Studios Mina Hasman, SOM Rory Harmer, Tate Harmer Ruth Butler, Ruth Butler Architects Wendy Charlton, RCKa

Cover photo by Tim Crocker, courtesy of Mikhail Riches

# Welcome

If there is one positive legacy of the coronavirus pandemic, it is the understanding that fast and radical change is possible when societies are faced with a clear and imminent threat. The global climate emergency requires no less radical and profound action for change. As countries around the world are finding their way to a 'new normal', the climate agenda has to play an integral role in shaping an environmentally and socially resilient built environment. Architects have a responsibility and an opportunity to take a leading role in addressing the climate crisis and implement net zero strategies now in order to achieve the RIBA 2030 Climate Challenge targets. We need to re-think approaches to design and collaboration, adopt performance-based targets and gain a deeper understanding of whole-life impacts. The 2020 RIBA Smart Practice Conference: Confronting the Climate Emergency will introduce participants to key concepts and tools for assessing the impact of design and material choices, showcase best practice and pioneering approaches, and promote open dialogue and ongoing knowledge exchange to address the challenge of our time together.

#### **Joanna Bacon,** Managing Partner, Allies and Morrison

Jo studied architecture at the University of Cambridge where she was tutored by Bob Allies. Today, building on a long career at the practice, Jo helps to define the business strategy and oversees operations at Allies and Morrison. She particularly enjoys working with commercial clients and has delivered major projects including BBC Media Village in White City and 100 Bishopsgate in the City of London. With several of Allies and Morrisons'

key education projects under her belt, Jo is also actively involved in fostering architectural culture. She is Chair of the RIBA Awards Group, serves as a Board Member and was previously Vice President International. She chaired the RIBA Gender Pay Working Group which produced the #CloseTheGap report in 2018, is a Trustee of the Architectural Association and was shortlisted for the AJ's Woman Architect of the Year Award in 2015.

# **RIBA SMART PRACTICE CONFERENCE 2020**

**30 SEPTEMBER: PROJECTS** 

Welcome 1.00pm

Joanna Bacon, Managing Partner, Allies and Morrison; RIBA Board Member and Head of Awards

1.10pm Keynote: Everyday Activism

Evelyn Choy, Co-ordinator, Architects Climate Action Network

Introducing the RIBA 2030 Climate Challenge 1.35pm

Gary Clark, Principal, Regional Leader Science and Technology,

HOK London Studio

1.55pm **Understanding Net Zero** 

Karl Desai, Senior Advisor - Advancing Net Zero, UKGBC

2.10pm **Beyond Carbon** 

Maria Smith, Director of Sustainability and Physics, Buro Happold

2.30pm Break + Virtual Networking

2.50pm RETROFITTING (SUB)URBIA

> **Principles of Residential Retrofit** Marion Baeli, Partner, PDP London

Making Retrofit Work for Residents: Energiesprong Pilot Nottingham

Richard Partington, Founding Director, Studio Partington

# CONFRONTING THE CLIMATE EMERGENCY

Is Passivhaus Limiting Your Creativity? 3.40pm

**Debunking Common Misconceptions** Justin Bere, Director, bere:architects

4.10pm **Material Explorations** 

Fergus Feilden, Director, Feilden Fowles

4.30pm Break + Virtual Networking

4.50pm MOVING TOWARDS THE CIRCULAR ECONOMY

Introducing a Cradle to Cradle Approach

Marco Abdallah, Head of Engineering UK, Drees & Sommer

Applying Circular Economy Thinking at the

**Brussels World Trade Centre** Johan Anrys, Partner, 51N4E

Michael Moradiellos del Molino, Head of Real Estate Belux & France,

Drees & Sommer

Closing Remarks 5.50pm

Lucy Carmichael, RIBA Director of Practice

Close of Conference 6.00pm

7.00-8.15pm Online Sustainability Speed Mentoring

# **EVERYDAY ACTIVISM**

For most, the scale of the climate challenge seems daunting. Working within the constraints of everyday practice, the ability of individual architects to make a meaningful difference can appear frustratingly limited. While we all need to take responsibility for the impact of our work and use every opportunity to learn and improve, Evelyn Choy argues that good design alone is not enough, and for the power of collective action to overcome the limitations of individual agency. Embedded within the regulatory and economic framework determined largely by government decisions, architecture is inherently political. Eve contends that to achieve systemic change, architects should employ an activist lense and shows up how to get started from tomorrow.

#### Evelyn Choy, Coordinator, ACAN

Eve is an Architectural Assistant at HASSELL and a coordinator at the Architects Climate Action Network (ACAN). She completed her Bachelor and Masters degrees in Architecture at the University of Melbourne, with an exchange semester at the Technical University of Delft. Inspired by her time abroad, she then moved to London and started working for Hassell as a graduate in 2016. Eve started her climate

activism journey by joining ACAN and subsequently becoming a coordinator in March 2020. ACAN calls for rapid decarbonization of the built environment, the adoption of regenerative principles to sustain communities and ecosystems, and wider cultural transformation of the dominant professional culture in order to achieve those changes.

(a) Architects CAN

# INTRODUCING THE RIBA 2030 CLIMATE CHALLENGE

Since the launch of the RIBA 2030 Climate Challenge, around 120 Chartered Practices have signed up and declared their commitment to meeting net zero (or better) whole life carbon for new and retrofitted buildings by 2030. The built environment is responsible for around 40% of global carbon emissions and architects have a significant role to play in reducing UK greenhouse gas emissions. The 2030 Climate Challenge sets a series of targets for practices to adopt to reduce operational energy, embodied carbon and potable water consumption. Chair of the RIBA Sustainable Futures Group, Gary Clark, will introduce the targets, highlight embodied versus operational carbon, and explain where to find the relevant information and easy to use tools to get started in benchmarking your projects.

# **Gary Clark**, Principal, Regional Leader Science and Technology, HOK London Studio

Gary is the regional leader of the HOK's Science + Technology practice covering the UK, Europe and the ME. Gary brings more than 30 years of experience designing high-performance buildings across multiple sectors for some of the UK's most respected practices. An authority on green design, Gary serves as a visiting professor of sustainable architecture

at Queens University Belfast and frequently advises the UK government on sustainable policy. He is chair of the RIBA Sustainable Futures Group and has helped shape the institute's policy and guidance on energy-efficient buildings and resilient design, including as Lead Author of the RIBA Sustainable Outcomes Guide.

# **UNDERSTANDING NET ZERO**

There is wide-spread understanding that 'Net Zero' ought to be the ultimate goal in pursuit of climate-friendly practice. But how many truly understand what 'Net Zero' means, and how to achieve it? Varying definitions and boundaries have been used, and changing external factors such as the energy mix in the grid are shifting the goal post. Sustainability experts have been debating for some time to arrive at a commonly agreed definition. In this short session, UKGBC's Karl Desai will give an update on the current state of the debate and put architects in a position to better evaluate possible routes to Net Zero in their own projects.

# Karl Desai, Senior Advisor, Advancing Net Zero, UKGBC

Karl is Senior Advisor for UKGBC's Advancing Net Zero programme and led in the development of UKGBC's Net Zero Carbon Buildings: A Framework Definition which has catalysed industry-wide action in tackling buildings' whole life carbon.

He also co-authored Building the Case for

Net Zero which helps provide the BE sector with greater confidence on the design and cost changes required to deliver net zero carbon buildings. Originally from Australia and with a background in architecture, Karl believes net zero can only be achieved through coordinated action in the built environment.

#### **BEYOND CARBON**

While carbon emissions, whether embodied or operational, have rightly captured global attention as the key driver of climate change, one should not lose sight of less well-published contributors to global warming and of the wider environmental impacts of construction activity – both on habitats and on humans. In this session, Maria Smith will bring to our attention a range of pollutants associated with construction activity or with the production of certain building materials, greenhouse gases many times more potent than carbon, and will call on architects to consider unsustainable land use changes occurring due to development activity.

# Maria Smith, Director of Sustainability and Physics at Buro Happold

Maria is an award-winning architect, engineer, writer and curator with former leading roles at Studio Weave, Interrobang Architecture and Engineering, and Webb Yates Engineers, where she was a Director focused on sustainability and transdisciplinary practice. Maria is a RIBA National Council member, a trustee of the Architecture Foundation, and on the steering

committee of Architects Declare. In 2017 she was appointed as a GLA Design Advocate where she serves on the Ecological Urbanism Sounding Board. Maria has written for publications including the FT and RIBAJ, and most recently was chief curator of the 2019 Oslo Architecture Triennale, "Enough: The Architecture of Degrowth".

# RETROFITTING (SUB)URBIA

The UK has some of the oldest building stock in Europe. Space heating alone accounts for roughly 60% of total delivered residential energy demand. Considering the low annual rate of replacement, retrofitting the existing building stock is inarguably the most important measure to reduce operational energy consumption to any significant degree. However, questions of financial viability, fragmented ownership, and a relative lack of skills and knowledge required to implement technically sound energy retrofits are just some of the barriers to widespread take-up. In this session, Marion Baeli will explain the principles of residential retrofit and why taking a whole-house approach is essential. As project architect for one of the UK Energiesprong pilot projects, Richard Partington will emphasise the leading role of the architect in engaging with residents, and highlight the financial model used to roll out retrofit across aged social housing stock, thereby reducing fuel poverty and greatly improving the wellbeing of residents.

#### Marion Baeli, Partner, PDP London

Marion is an architect and author who has extensive experience designing and delivering large scale, complex projects. She collaborates with key developer clients and estates in central London, placing her passion for low energy design at the centre of her work. Part of the NLA Net Zero panel, she approaches sustainability with a pioneering attitude. Her 2013 book, Residential Retrofits, 20 Case Studies followed the delivery of the award winning Princedale Road project, the first certified PassivHaus retrofit in the UK. Most recently, she has been involved in the Chelsea Barracks development, the restoration of The Garrison Chapel and the contemporary and sensitive upgrade of Eighty Strand. @pdparchitects

#### **Richard Partington,** Founding Director, Studio Partington

Since founding Studio Partington in 1998, Richard has realised a number of exemplar projects including Parkmount in Belfast. Recent work includes the widely-published and multi-award winning Derwenthorpe in York for the Joseph Rowntree Housing Trust and Howden Urban Extension in Yorkshire. Richard is co-editor of Better Buildings – learning from buildings in use by RIBA Publishing, and has written a series of NHBC Foundation best practice guides. Richard is expert advisor to the Ministerial Advisory Group in Northern Ireland. He co-chaired the Zero Carbon Hub's 'Design vs As-Built' steering group, set up to investigate the performance gap.

# @s\_ptweet

# IS PASSIVHAUS LIMITING YOUR CREATIVITY? DEBUNKING COMMON MISCONCEPTIONS

Passivhaus has for some time become established as the gold standard for low energy building design. Predicated on the optimisation of building fabric, form and orientation, achieving Passivhaus certification results in on average 75% lower energy consumption compared to the average new-build, and a comfortable indoor environment. However, despite these benefits, myths and misconceptions remain widespread. For some architects, a reluctance to engage with the standard results from the notion that it requires the simplification of the building form to the dreaded 'box' and limits creative expression. Award-winning architect and UK Passivhaus pioneer, Justin Bere, sets out to dispel this myth and demonstrate that beauty and performance are entirely compatible. He will explain the trade-offs that may indeed be required when designing more complex forms, and why these should not deter any architect used to balancing multiple project requirements as par for the course.

#### Justin Bere. Director, bere:architects

Justin founded award-winning bere:architects in 1994, driven both by environmental imperatives and a strong design ethos. A pioneer of Passivhaus buildings in the UK – both new build and retrofit – Justin defines design quality as science and art in harmony. He's passionate about the art, and feels a deep responsibility to do the science. The practice carries out project-based R&D work and has

collaborated on academic and peer-reviewed research papers demonstrating the very high standard of health, comfort and energy performance of their buildings. Justin helped set up the UK's first Passivhaus Conference and co-founded the UK's Passivhaus Trust. Most recently, bere:architects realised the UK's first Passivhaus Plus.

@berearchitects

# MATERIAL EXPLORATIONS

Founded in 2009, Feilden Fowles has multiple RIBA Awards under its belt and was shortlisted for the Stirling Prize for the Weston gallery and visitor centre at Yorkshire Sculpture Park. Describing their approach as both academic and hands-on, the practice emphasises research and testing the physical and visual properties of materials. A strong proponent of passive environmental design, the practice often draws from local traditions in construction and vernacular architecture, preferring to source materials locally where possible.

#### Fergus Feilden, Director, Feilden Fowles

Fergus is passionate about working with enlightened clients to create shared visions and delivering complex and challenging projects. Current commissions include the first new building at Carlisle Cathedral for over 300 years, a masterplan for Yorkshire Sculpture Park and the National Railway

Museum in York. Fergus led on the design of the Weston, a new gallery and visitor centre at Yorkshire Sculpture Park, which won RIBA Yorkshire Building of the Year, an RIBA National Award and was shortlisted for the Stirling Prize. He has lectured widely, is a RIBA Awards judge and visiting professor at Sheffield University. 

FeildenFowles

# MOVING TOWARDS THE CIRCULAR ECONOMY

The Circular Economy concept as applied to contemporary economic systems has gained momentum since the 1970s. Several architects, among them American Bill McDonough and Swiss Walter Stahel, have been instrumental in developing the modern CE and Cradle to Cradle frameworks. Seen by early adopters as the future economic model, products and services are now emerging in Europe, supported by progressive legislation, which seek to put the principles of the circular economy in practice. One of the first countries to require new builds to follow CE principles, Belgium enables project teams and material suppliers to build their understanding of its application in design and construction. Project architects 51N4E and the engineering and project management consultancy Drees & Sommer are leading on the refurbishment and extension of the Brussels World Trade Centre. They will introduce the Cradle to Cradle approach and share lessons from this pioneering project.

#### Marco Abdallah, Head of Engineering UK, Drees & Sommer

Marco is a passionate engineer with a strong focus on sustainability and innovation. Heading up international engineering, project management and consultancy firm Drees & Sommer's UK engineering and sustainability team, his mission is to drive Zero Carbon, Circular Economy and Smart Building initiatives. Using Cradle to Cradle principles, Marco's ambition is to develop buildings which are not just "less bad" in regard to their ecological footprint but that provide value to the environment. To achieve those ambitions, he collaborates with multidisciplinary teams including engineers of all trades, architects, cost consultants, building scientists and chemists. @Drees Sommer

#### Johan Anrys, Partner, 51N4E

Johan graduated from the Sint Lucas School of Architecture in Brussels. In 1998 he cofounded Brussels-based architectural practice 51N4E, which specialises in architecture, strategic planning and urban renewal. John leads on the practice' work on affordable housing and urban renewal. Most recently, 51N4E led on the development of strategic visions for several European metropoliton regions including Bordeaux and Brussels (Bruxelles Metropôle 2040). Currently, Johan leads on the redevelopment of the World Trade Center skyscraper complex in the Northern Quarter. John lectures regularly and serves as jury member in Belgium and internationally.

#### Michael Moradiellos del Molino, Head of Real Estate Belux & France, Drees & Sommer

After finishing his studies of architecture at the University of Brussels, Michael Moradiellos began a PhD in sustainable urban planning in Spain, where he went on to work as an architect and educator. He was a co-founder and partner of several companies in the field of urban planning, architecture and sustainable development, and is an expert in Circular Economy and Cradle to Cradle strategies. He pursues innovation in cooperation with stakeholders to realise environmentally and socially sustainable projects that are financially viable. Michael joined Drees & Sommer Belgium to develop the Cradle to Cradle design principle in the French-speaking markets. @Drees Sommer

# **SELECT TOOLS & RESOURCES**

**Architects Declare Presentations** 

Building Carbon Database, RICS

Climate Emergency Design Guide, London Energy Transformation Initiative (LETI)

Embodied and Whole Life Carbon Assessment for Architects, RIBA

Embodied Carbon in Construction Calculator, EC3

Emissions Reduction Tool, Hawkins\Brown

Net Zero Carbon Buildings: A Framework Definition, UK Green Building Council

Net Zero Operational Carbon: Ten Key Requirements for New Buildings, LETI

Passive House Planning Package

PH Ribbon (a bolt-on to PHPP which calculates embodied carbon)

RIBA Briefing Template

RIBA Sustainable Outcomes Guide

The Inventory of Carbon and Energy (ICE), University of Bath

The Energy Benchmarking Tool, CIBSE

Whole Life Carbon Assessment for Architects, RIBA

Whole Life Carbon Assessment for the Built Environment, RICS

# SELECT BOOKS BY RIBA PUBLISHING

Environmental Design Pocketbook by Sofie Pelsmakers, 2012

Designed to Perform by Tom Dollard, 2017

EnerPHit by James Traynor, 2019

101 Rules of Thumb for Sustainable Buildings and Cities by Huw Heywood, 2015

Targeting Zero: Embodied and Whole Life Carbon Explained by Simon Sturgis, 2017 Energy

Modelling in Architecture: A Practice Guide by Sonja Oliveira, Bill Gething, Bill and Elena Marco, 2020

The Reuse Atlas by Duncan Baker-Brown, 2017

Better Buildings by Richard Partington and Simon Bradbury, 2017

# RIBA SMART PRACTICE CONFERENCE 2020

01 OCTOBER: PRACTICE

1.00pm Welcome

Professor Alan Jones, RIBA President

1.10pm Keynote: No Such Thing as Waste

Anders Lendager, CEO, Lendager Group

HOW TO TALK TO YOUR CLIENT ABOUT SUSTAINABLE OUTCOMES 1.35pm

Sustainability by Stealth

Ruth Butler, Director, Ruth Butler Architects

The Power of Storytelling

Julia Skeete, Associate Director, Skidmore, Owings & Merrill

2.00pm Learning from Clients (Moderated Panel Discussion)

Jane Wakiwaka, Head of Sustainability - Real Estate, The Crown Estate

John Davies, Head of Sustainability, Derwent London

Communicating your Sustainability Credentials as a Small Practice 2.20pm

> Tara Gbolade, Co-founder, Gbolade Design Studio Clare Nash, Director, Clare Nash Architecture

2.45pm Break + Virtual Networking

3.05PM UNDERSTANDING WHOLE-LIFE CARBON

**Optimising Structures in the Design Process** 

Andrew Wylie, Partner, Buro Happold

Interrogating the WLC Impact of Your Project (Interactive Exercise)

Louisa Bowles, Partner, Hawkins\Brown

Dr Joe Jack Williams, Associate, Feilden Clego Bradley Studios

# CONFRONTING THE CLIMATE EMERGENCY

4.25pm Break + Virtual Networking

4.45pm Learning from Projects

James Turner, Associate, Mikhail Riches

5.10pm TRANSFORMING YOUR PRACTICE

Understanding your Impact and Identifying Quick Wins

Diana Dina, Head of Sustainability & Regenerative Design,

Haworth Tompkins

Your Studio Your Laboratory

Paul Bulkeley, Director, Snug Architects

5.50pm Introducing a Roadmap for Change

Authors: Ian Taylor, Managing Partner, Feilden Clegg Bradley Studios;

Mina Hasman, Associate, SOM; Alasdair Dixon, Partner, Collective Works.

Presenter: Alasdair Dixon

How Can You Transform Your Practice?

Discussion in online break-out groups and joint moderated discussion

6.25pm Closing remarks

Lucy Carmichael, RIBA Director of Practice

6.30pm Close of Conference

Online Sustainability Speed Mentoring 7.00-8.15pm

# **WELCOME**

#### Professor Alan Jones, RIBA President (2019-21)

Alan Jones is Professor of Architecture (Practice & Education) at Queen's University Belfast, and founder of Alan Jones Architects. His built work is cited in design guides, and has received awards and commendations. He was joint head of Architecture at Queen's (2008-16) and has co-edited the book "Defining Contemporary Professionalism for Architects in Practice & Education" with Rob Hyde.

While on the RIBA Council and Board, Alan has championed opportunity for all and a closer relationship between education and practice. The first RIBA president to come from Northern Ireland, Alan is committed to furthering social mobility, and believes in working together to achieve progress.

@AlanJonesFRIBA

#### KEYNOTE: NO SUCH THING AS WASTE

Every year, around 10 million tons of materials are consumed by the Danish construction industry and a similar amount discarded as waste. While exact figures vary, the overall picture in the industrialised countries is the same: a largely one-way stream of extraction, consumption and disposal with only small volumes re-used or recycled, and as yet no systematic approach in place to capturing, certifying and re-supplying viable materials and products for future use. In addition to creating high levels of carbon emissions, the ongoing consumption of primary materials is clearly unsustainable. While designing one of his early projects – Upcycle House – Danish architect Anders Lendager realised that in order to scale up this approach, a dedicated supply chain had to be developed. Since then, Anders formed an upcycling company that is now supplying not only the construction industry but increasingly also clients in other sectors. In this session we will hear about the opportunities and challenges involved in shifting towards a circular economy business model, and what lessons can be learned from the Danish experience.

#### **Anders Lendager,** Founder and CEO, Lendager Group

Anders is an architect, CEO and founder of Lendager Group. He is dedicated to the development and promotion of sustainability both in his own practice, as an external consultant and keynote speaker. Anders is widely recognized as a sustainability pioneer who is pushing the boundaries to make Danish

and international design and construction more sustainable. Lendager Group has established itself as one of the most influential companies in Denmark by pursuing waste reduction and prevention through the development of upcycling and circular economy strategies across architecture, urban development and product design.

@AndersLendager

# HOW TO TALK TO YOUR CLIENT ABOUT SUSTAINABLE OUTCOMES

To achieve sustainable outcomes it is vital to set clear objectives from the beginning, starting at the briefing stage and continuously monitoring them throughout the process. How best to communicate sustainability targets to the client may vary by project type and complexity, and the client (organisation). In all cases, leadership by the architect is key, our speakers will argue. For Ruth, sustainability should not be negotiable and the added cost within the context of smaller projects typically falls within the range of other marginal decisions architects are making. For Julia, working on complex projects in international locations, it is essential to understand the local regulatory framework, present a convincing case for pursuing ambitious targets and actively build consensus.

#### Ruth Butler, Director, Ruth Butler Architects

Ruth is a Chartered Architect, RIBA Client Adviser and CABE Built Environment Expert. She was inspired to become an architect by early work experience at Hampshire County Council. Ruth joined David Morley Architects in 1995, becoming a partner and growing the practice to 50 staff. Notable projects include, the Construction Skills Centre for Argent Kings Cross; the Indoor Athletics Centre at Brunel University; and the Biosciences Centre at Liverpool University. A specialist in Learning Environments, Ruth has extensive experience as a Client Adviser, and served as Client Adviser for RIBA Stirling Prize winning Burntwood School in Tooting. Ruth founded her own practice Ruth Butler Architects in 2010. @RuthButlerRIBA

# **Julia Skeete,** Associate Director, Skidmore, Owings & Merrill (SOM)

Julia is a Project Management Associate Director at SOM in London, having collaborated with SOM in San Francisco, New York and Chicago since 1999. Throughout her career, Julia has worked across roles in design, technical architecture, project management, and business development. She is an active member of SOM's Women's Initiative and SOM NOMA group. In 2008, Julia was included in the AJ100 Women in Architecture list and in 2019 she was shortlisted for the European Best Woman Project Manager. She is currently leading the management of the SOM designed expansion and renovation of the United Nations Palais des Nations campus in Geneva. @SOM Design

# LEARNING FROM CLIENTS

# **Jane Wakiwaka**, Head of Sustainability – Real Estate. The Crown Estate

Jane is responsible for developing and integrating the sustainability strategy for The Crown Estate's real estate assets, which include the Central London portfolio, 17 regional retail assets across the UK, as well as the rural portfolio. The strategy includes implementing the Development Sustainability Principles across all new development and refurbishment schemes, embedding sustainability in the management of standing assets, and engaging with customers. She is involved and engaged with different industry bodies including the UKGBC, BBP and is the chair of the GRESB European Benchmark Committee.

@TheCrownEstate

#### **John Davies,** Head of Sustainability, Derwent London

John is responsible for leading the company wide sustainability and responsibility agendas. He is a recognised sustainability expert in the commercial property sector and has been instrumental in creating several industry leading sustainability programmes and strategies. Prior to joining Derwent London, John was Head of Sustainability at Davis Langdon LLP. Before joining Davis Langdon John worked in the client domain as a sustainability advisor on a range of major projects, most notably at BAA PLC, where he lead the sustainability agenda within the Terminal 5 design phase.

@derwentlondon

# COMMUNICATING YOUR SUSTAINABILITY CREDENTIALS AS A SMALL PRACTICE

You have the sustainability expertise, but how should you communicate it to your prospective clients? Large practices have the staff numbers and capacity to advertise a wide range of services and specialist expertise. But as a small practice, should you 'put all your eggs in one basket' and put your commitment to sustainable design front and centre of your website and select project experience? Will clients respond positively across the board, and what messaging will appeal to your specific client demographic? In this session we hear from two practice directors who have taken the leap and will share how they tailored their messaging to a public sector and private residential clients' audience respectively.

#### **Tara Gbolade,** Co-founder, Gbolade Design Studio

Award-winning Gbolade Design Studio specialises in residential and mixed-use developments for public and private sector clients. A winner of the RIBAJ Rising Stars award, Tara follows an ethos of design-led, commercially viable, innovative, and sustainable practice. Tara works with Local Authorities including Epping Forest District Council, Croydon and Harlow & Gilston Garden Town where she leads the development and implementation of their sustainable design is embedded within new residential developments and the regeneration of existing communities.

#### **Clare Nash,** Founding Director, Clare Nash Architecture

Based in Brackley in South Northamptonshire, Clareg specialises in rural architectural design, particularly energy retrofit and new build. Clare draws her inspiration from the vernacular, having undertaken research into the vernacular in Bolivia, Papua New Guinea and China for her master thesis. She has also lived and worked in Germany and Liechtenstein. Clare is an Associate Lecturer, teaching architectural business, and a RIBA Studio Examiner at Oxford Brookes University. She is author of Contemporary Vernacular Design: How British Housing can Rediscover its Soul and has been recognised as an RIBA Role Model.

# UNDERSTANDING WHOLE-LIFE CARBON

As the knowledge of low operational energy design is becoming more widespread and the grid continues to decarbonise, embodied carbon has emerged as a key factor in the pursuit of net zero, and a key component of a building's whole-life carbon balance. Structural engineer Andrew Wylie will introduce the concept of embodied carbon and explain how architects can challenge engineers to optimise structures in the design process. Louisa Bowles and Jo Jack Williams will lead an interactive workshop designed to help architects understand the principles of whole-life carbon assessment, where to look for reliable embodied carbon information and how to interrogate the impact of their design choices over the lifecycle of the building.

#### Andrew Wylie, Partner, Buro Happold

Andrew is a structural engineer with particular experience in museums and performance venues. He leads the portfolio of Buro Happold's UK Culture Sector projects, having worked on projects including The Royal Shakespeare Theatre, The Factory in Manchester and The London Natural History Museum. Andrew has extensive experience in timber design and engineering, designing some of the first buildings in the UK to use Cross Laminated Timber. Andrew is leading Buro Happold's response to the Climate Emergency focusing on low carbon engineering and is currently redrafting the Association of British Theatre Technicians' sustainability guidance for theatre design. @burohappold

# **Louisa Bowles,** Head of Sustainability Hawkins\Brown

Louisa has structured the practice's Whole Life Carbon strategy to ensure all projects are measuring the balance between embodied carbon and operational energy. She was instrumental in the development of H\B:ERT, Hawkins\Brown's Revit-based carbon measuring tool. Her project work includes the Urban Sciences Building at Newcastle University and the Biochemistry Completion project for the University of Oxford. Her team completed a research commission called Net Zero Hotel, investigating how Net Zero can be achieved in the hospitality sector. An active member in London's various climate action groups such as LETI, Louisa was shortlisted for the AJ's Sustainability Champion of the Year award in 2020.

@Hawkins Brown

#### **Dr Joe Jack Williams,** Associate, Feilden Clegg Bradlev Studios

Joe is an engineer working across FCBStudios' research and innovation programmes. His Doctorate focused on the influence of school buildings on the students' performance, with a high-level study examining the performance of the Building Schools for the Future programme, as well as a detailed holistic study of four schools. Alongside Partner Ian Taylor he leads FCBStudios' environmental research, identifying, developing and enabling research across the practice. He has taught at universities across the UK, including Oxford Brookes, UCL, UWE, University of Bath, and London Met, and is part of core research groups within CIBSE and LETI. @FCBStudios

# LEARNING FROM PROJECTS

When Mikhail Riches won the 2019 Stirling Prize for their all-Passivhaus social housing scheme Goldsmith Street, it set a new UK benchmark for local authority-led sustainable housing at scale. Perhaps surprisingly, the practice had never designed to full Passivhaus standard before. Yet for Goldsmith Street it was able to build on previous experience of passive design strategies, and Project Architect James Turner found that his experience of small scale residential Passivhaus design proved to be applicable at scale. Now working on new projects for York City Council, the practice is applying its learning to date to face the next challenge of achieving net zero carbon.

#### James Turner, Associate, Mikhail Riches

James joined Mikhail Riches in 2014 to work on large scale residential projects and was made an Associate in 2016. James' expertise is in leading project teams through all stages, in particular through detailed design and construction using his experience in quality control, risk management and project delivery. James is the Associate in charge of Goldsmith St, Hackney Small Sites and St Andrew's

Riverside using his experience of working with local authorities to deliver quality housing at scale. Goldsmith St for Norwich City Council is the largest 100% Passivhaus, 100% Social Housing scheme in the UK. James is working with the Green Register and the Passivhaus Trust to promote good Passivhaus design within construction

@MikhailRiches

# TRANSFORMING YOUR PRACTICE

Your practice is committed to achieving the 2030 Climate Challenge but the task may seem daunting. Between benchmarking your current performance, upskilling the team and embedding sustainability targets across all projects, where should you begin and how should you prioritise your time and resources? Most practices are still working to address the same questions, even those at the vanguard of the climate movement. In this session we will not be given simple answers but insight in the strategies employed by AJ100 practice Haworth Tompkins, and smaller regional practice Snug Architects who used the lockdown period to transform their studio to 'near net zero'. Developed by FCBStudios' Ian Taylor, SOM's Mina Hasman and Collective Works' Alasdair Ben Dixon, a 'Roadmap for Change' sets out 5 key steps to help practices map out a path towards sustainable practice.

# **Diana Dina,** Head of Sustainability and Regenerative Design at Haworth Tompkins

Diana helps develop and lead Haworth Tompkins' sustainability strategy including practical in-house support/training, external advocacy and independent research. She is a qualified architect and a Certified Passivhaus Consultant. Following her MSc in Environmental Design at the Bartlett, Diana joined bere: architects, working on low energy and passive house certified buildings and was involved in several Innovate UK funded Building Performance Evaluation studies. Subsequently, at Gluckman Smith, she specialised in designled low energy new build and retrofits, including the Font House project (Leicestershire) which won a RIBA regional award, Conservation award, and also won her a RIBA regional Project Architect Award 2018. @haworthtompkins

#### Paul Bulkeley, Director, Snug Architects

Paul is the founder of Snug Architects, a multi award-winning design studio and RIBA Practice Role Model based on the South Coast. He is a gifted communicator and recognized thought leader in the industry, having spoken internationally on design and business ethics. He also lectures in Architecture and Urban Design at Cambridge and Manchester MET and Southampton University, where he pioneered a new civil engineering and architecture degree. His greatest achievement to date is winning the international design competition for The Wall of Answered Prayer which will be the largest Christian monument to be built in the UK since the last cathedral. @snugarchitects

#### Alasdair Dixon. Partner. Collective Works

Alasdair is a founding Partner of Collective Works, co-ordinator of the Architects Climate Action Network and a Trustee of Architecture for Humanity UK. He has long held a commitment to finding a better way for architects to balance the needs of the wider world with the needs of their clients and stakeholders. He has been recognised for his work and contributed to the RIBA Ethics and Sustainable Development commission. He now speaks regularly on Ethics, Sustainability and Social Value.

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