George Adams PPCIBSE Spie Tom Barney Howden Group Prof Roberto Amendolia f'rmly Italian Emb'y Will Arnold IStructE Nathan Baker IOM Edith Blennerhassett Arup Clara Bagenal-George Elementa Devorah Block Dr Bill Bordass Usable Buildings Trust Jane Briginshaw Design England Lynne Ceeney Lytton Consulting Keith Clarke Partenaires de Développement Interurbain and Constructionarium Louise Clarke Berkeley Group Peter Clegg FCB Studios Caroline Cole Colander Mike Cook Drawn Thought Paddy Conaghan Hoare Lea Prof Andy Ford PPCIBSE LSBU Dr Tim Forman U of Cambridge Simon Foxell The Architects Practice Dr Julie Futcher co-founder Urban Generation Nicky Gavron Bill Gething Sustainability + Architecture Dr Julie Godefroy Julie Godefroy Sustainability Kristen Guida GLA Prof Peter Guthrie University of Cambridge Dave Hampton The Carbon Coach Hattie Hartman The Architects Journal Prof Colin Haylock PPRTPI Haylock P&D Kelly Harrison WhitbyWood Stephen Hill C₂0 futureplanners Mike Hitchens Pell Frischmann Sue James TDAG Alex Johnstone Architype Chris Jofeh Arup Prof Paul Jowitt, PPICE Heriot-Watt U Lara Judeh Expedition Chinnie Lau Pell Frischmann David Lindsey Max Fordham LLP Richard Lorch Editor 'Buildings and Cities' Ciaran Malik AA + U of Arts Prof Elena Marco UWE Dr Kerry Mashford interfacing Anne Minors Sound Space Vision Hal Moggridge Colvin and Moggridge Smith Mordak UKGBC Robin Nicholson Cullinan Studio Tom Nomico The Building Centre Prof Tadj Oreszczyn, UCL Energy Institute Adam Poole Dr Sunand Prasad PPRIBA Perkins&Will Erland Rendall Artorus Prof Flora Samuel U of Cambridge Andrew Scoones ngenuity Ltd Prof Richard Simmons Bartlett, UCL Morwenna Slade Historic England Oliver Smith 5th Studio Simon Sturgis Targeting Zero IIp Lvnne Sullivan LSA Studio Judith Sykes Expedition Helen Taylor Scott Brownrigg Ian Taylor FCB Studios Laura Turner Cullinan Studio Chris Twinn TwinnSustainabilityInnovation Michelle Wang Deloitte Dr Elanor Warwick Clarion Housing Group Dr Wei Yang Wei Yang & Partners Jane Wernick engineers HRW Prof Mark Whitby PPICE whitby wood Ollie Wildman Ramboll Albert Williamson Taylor AKT II

EDGE Biannual Report 2023

the Edge is a multidisciplinary built and natural environment think tank and network with members drawn from across numerous different professions (and beyond). It held its first debate on June 18th 1996.

This report covers the two year period July 2021 to July 2023

edgedebate.com

2021-23 Summary

The time period of this report starts approximately with the lifting of Covid restrictions on 19th July 2021 and follows the slow return to something approaching normal - a process that is still far from complete two years later with most meetings and events being held either online or in a hybrid format. Throughout this time the Edge has maintained a busy schedule of events covering an ever-widening range of topics.

Highlights include:

- Our normal cycle of public debates and policy-focused roundtables
- We have run a series of webinars and meetings to discuss policy with branches of Government including DLUHC, DBEIS, Defra and the CCC.
- the Edge continued in its role organising the conference sessions at the Futurebuild exhibition in March 2022 and 2023, featuring three days of essential discussion and presentations at each event.
- Continued work on the cross-industry Climate Action Plan, developed by the Edge for the Construction Industry Council and launched at COP26 in November 2021. the Edge now coordinates Workstream 10 on Competence, Ethics and Advocacy
- An Edge/IStructE working group on low carbon concrete brought together experts from across the UK and beyond, resulted in a paper on the efficient use of GGBS
- the Edge has responded to numerous consultations on subjects including planning, whole life carbon, net zero and climate education
- the Edge published its Policy proposals for the built and natural environment in November 2022
- the Edge's planned programme of work on undergraduatelevel built and natural environment education is now underway, starting with a Roundtable meeting held in July 2023

WORKING IN PARTNERSHIP WITH: The Building Centre, CABE, CIAT, CIBSE, CIC, CIHT, CIOB, CPA, Futurebuild, ICE, IEMA, IOM, IStructE, LI, RIBA, RICS, SocEnv, UCL Energy Institute

the Edge

the Edge continues to meet on a monthly basis at one of the offices of our members and online. Co-ordinating meetings of a smaller core group are held between each whole group meeting.

Longstanding Edge member and pioneering building services engineer, Max Fordham, died in January 2022. Loved and cherished for his boundless energy and flow of disruptive ideas. He is much missed.

More recently arrived members of the Edge committee include:

- Nathan Baker, CEO of the Institute of Occupational Medicine (IOM)
- Tom Barney, Howden
- Devorah Block, Director of Circles Squared, co-founder of S/UA-Salon of Urban Architecture, co-founder and advisory board member of the International Centre for Research in the Culture of Childhood (CIRCI) and an Associate Editor for Museum Management and Curatorship.
- Louise Clarke, Group Head of Sustainability at the Berkeley Group
- Nicky Gavron, former Deputy Mayor of London and member of the London Assembly
- Kristen Guida, Urban Resilience Manger, GLA
- Kelly Harrison, Director, Whitby Wood
- Alex Johnstone, Architect, Architype
- Lara Judeh, Civil Engineer, Expedition Engineering
- Chinnie Lau, Senior structural engineer, Pell Frischmann
- Brogan MacDonald, Head of Sustainability (Building Structures), Ramboll UK
- Professor Elena Marco, Pro Vice-chancellor and Head of College of Arts, Technology and Environment at the University of the West of England (UWE) and Architect Board member for the Architects Registration Board (ARB)
- Tom Nomico, Executive Assistant to the Chief Executive, Building Centre
- Erland Rendall, Director, Atorus Consult
- Laura Turner, Architect, Cullinan Studio



Members recent activities beyond the Edge include:

- Will Arnold has been made a Fellow of the Institution of Structural Engineers.
- Bill Bordass is a member of the Heritage task group of the UK net zero carbon buildings standard. He is also on the technical and research committee of the Society for the Protection of Ancient Buildings (SPAB) and has been advocating people-centred 'soft retrofits'.
- Edith Blennerhassett has been elected Vice President of ASHRAE Ireland Chapter leading up to being President in 2024. She chairs the LETI working group on higher education retrofit and sits on CIBSE's EDI, Heritage and Healthcare committees, the Royal Academy of Engineering Working Group on Infection Resilient Environments and the CBC Church Building Council Building Services and Net Zero Advisory committee as well as the Fabric Advisory Committee for Canterbury Cathedral.
- Kelly Harrison is on the Board of Directors of Timber Development UK and an active member of the UK FIRES consortium
- The Trees and Design Action Group (TDAG) convened by Sue James, published Section Two of Trees, Planning and Development: A Guide for Delivery in May 2023. TDAG also published two other First Steps Guides, for Trees and New Developments (July 2022) and Urban Water (June 2023).

Sue James, with others, provided a chapter for the ICE Manual on Blue Green Infrastructure (Jan 2023). She also chairs the steering group for the conference, Trees, People and the Built Environment 5, to be held in Birmingham in April 2024.

- Brogan MacDonald has been registered as a Chartered Environmentalist (CEnv). She was appointed Head of Sustainability in Ramboll Building Structures and co-authored the book, *Circular economy and reuse guidance for designers* for the Institution of Structural Engineers.
- Hal Moggridge has been campaigning to save Victoria Tower Gardens in Westminster from conversion into a museum and against the principle of parkland being seized for politically favoured building projects without equal alternative provision being made as National Planning Policy requires.
- Smith Mordak has been appointed Chief Executive of the UKGBC
- Robin Nicholson was awarded an Honorary Doctorate of Design by the University of the West of England in July 2022.
- Sunand Prasad has been awarded an OBE in the 2023 Birthday Honours for services to regeneration and is the Chair of the UK Green Building Council (UKGBC) as well as the new programme chair and director for the European Healthcare Design 2024 Congress, Exhibition and Awards
- Flora Samuel has been appointed the sixth Professor of Architecture (1970) and the new Head of School in the University of Cambridge
- Oliver Smith and 5th Studio have recently delivered the Urban design masterplan and business case for Stratford Station, E8 and continue to combine project work with research at the far ends of the normal architectural spectrum including mechanisms for the delivery of retrofit at scale, the nature of future work and the critical role of place-making in transport infrastructure design.
- Judith Sykes has been made a Fellow of the Royal Academy of Engineering and appointed as an Independent Advisor to the Board of Homes England
- Lynne Sullivan, Julie Godefroy and Will Arnold were Steering Group members for the UKGBC Net Zero Whole Life Carbon Roadmap for the Built Environment launched in the blue zone at COP26 in 2021.
- Lynne Sullivan co-authored the National Retrofit Strategy endorsed by CLC in 2021, and cofounded the National Retrofit Hub 2023 which she now Chairs.
- Helen Taylor, writing with Sharon Wright, has published Community Schools: Designing for sustainability, wellbeing and inclusion (RIBA, 2023)
- Chris Twinn is a member of the Net Zero Carbon Building Standard Governance Board and a Director of the Low Energy Transformation Initiative (LETI). He also chairs LETI's housing retrofit working group. He serves on the committees of both CIBSE's Natural Ventilation and HVAC special interest groups
- Michelle Wang has been appointed Sustainability Manager in Deloitte's Global Real Estate Team
- Jane Wernick has been honoured with the 2023 Lifetime Achievement Outstanding Alumni Award by the University of Southampton
- Wei Yang has been inaugurated as the Chair of the Construction Industry Council (CIC)

Professional Institutions and other partners

the Edge continues to engage actively with the professional institutions holding regular contacts and meetings with their staff, chief executives and presidents whenever possible. A regularly quarterly forum has been established with the CIOB, RIBA and RICS and meetings have also been held with CIAT, CIBSE, Cabe, EWB, IEMA, ICE, IStructE and LETI as well as many others through the Edge's active engagement with the Construction Industry Council (CIC).

The recent and current changeover of Chief Executives at many of the major construction industry institutions has, though, proved a challenge to our capacity to speak to them all early on in their tenure.

We are also very pleased to welcome the Institute of Occupational Medicine (IOM) as the latest Edge partner organisation.

Futurebuild 2022 Debates

The Edge returned to the Excel Centre in March 2022 with a full conference programme under the heading of From Ambition to Zero – Net-zero pioneers and influential thought leaders take centre stage:

Day 1 – Tuesday March 1st 2022

- Edge Debate 119 at Futurebuild
 Beyond COP26: out action programme
 Chair: Shaun Spiers, Executive Director, Green Alliance
 Hannah Vickers, Co2nstructZero, Construction Leadership Council and Chief of Staff, Mace Group
 Rachel Skinner, CBE, Past-President, Institution of Civil Engineers and Executive Director, WSP
 Simon Foxell, Construction Industry Council Climate Change Panel, The Architects Practice and the Edge
 Sunand Prasad PPRIBA, Chair - UK Green Building Council and cofounder Penoyre Prasad Architects
- Edge Debate 120 at Futurebuild
 In a world where embodied carbon is regulated, what has changed?
 Chair: Rt. Hon. Philip Dunne, MP, Chair of the Environmental Audit Committee
 Speakers: Will Arnold, Part Z author and Head of Climate Action, IStructE
 Louisa Bowles, Partner and Head of Sustainability, Hawkins\Brown
 Josie C-Thornewill, Sustainability Director, Thakeham
- Edge Debate 121 at Futurebuild Resource efficiency in a circular, post-Brexit economy. What is the plan? Chair: Professor David Greenfield, Managing Director, Soenecs and RAEng Visiting Professor of Circular Economy, University of Brighton Speakers: Kate Young, Senior Public Affairs Officer, Aldersgate Group Dr Cyrille Dunant, Senior Research Associate, Department of Engineering, University of Cambridge and the Use Less Group Siraj Tahir, Senior Engineer, Circular Water Economy Lead, Arup Judith Sykes, Director, Expedition Engineering



Day 2 – Wednesday March 2nd 2022

| • | • | e 122 at Futurebuild eople – education, skills and diversity |
|---|---------------------|--|
| | Chair: Speakers: | Robin Nicholson, Fellow Cullinan Studio, Convenor the Edge Julie Godefroy, Head of Sustainability, CIBSE Keith Clarke, Chair, Constructionarium |
| • | Edge Debate | 123 at Futurebuild |
| | Making the s | hift to a resilient, zero carbon financial future |
| | Chair: Speakers: | Nick Molho, Chief Executive Officer, Aldersgate Group Andrew Simms, Coordinator, Rapid Transition Alliance, author, co-director of the New Weather Institute, Assistant Director, Scientists for Global Responsibility, Research Associate, University of Sussex Tony Greenham, Executive Director, South West Mutual, former Director of Economics, Royal Society of Arts and Founding member, Financing A Just Transition Alliance Sarah Ratcliffe, Chief Executive, Better Buildings Partnership Cllr Katie Thornborrow, Cambridge City Council |

• Edge Debate 124 at Futurebuild

Creating infection resilient environments

Chair:Professor Peter Guthrie, Commission ChairSpeakers:Professor Catherine Noakes, University of Leeds
Dr Shaun Fitzgerald, University of Cambridge
Dr Hywel Davies, Technical Director, Chartered Institution of Building
Services Engineers

Day 3 – Thursday March 3rd 2022

• Edge Debate 125 at Futurebuild

What should 'levelling up' really mean?

Chair: Speakers: Rose Grayston, Co-author of No Places Left Behind Commission report Dr Fran Darlington-Pollock, Chair, The Equality Trust and NGO Research Advisor Sarah Longlands, Chief Executive, Centre for Local Economic Strategies (CLES) John Wrathmell, Director, Strategy, Research & Economy, Greater Manchester Combined Authority (GMCA)

Richard Blyth, Head of Policy Practice and Research, RTPI



• Edge Debate 126 at Futurebuild

Raising aspirations – leading by example

- **Chair:** Bea Natzler, Senior Analyst Business and Buildings, Climate Change Committee
- Speakers: Jennifer Elias, Principal Building Performance Engineer, AECOM and member of LETI Sara Edmonds, Director, Studio so APCH, Coordinator, Architects, Clima

Sara Edmonds, Director, Studio seARCH, Coordinator, Architects Climate Action Network

Amos Simbo, Managing Director, Black Professionals in Construction Network (BPICN), CIC 2050 Group and Managing Director, Winway Services Penny Gowler, Director and Head of Sustainability, Elliott Wood

Ed Clark, Director, Arup, Chair of Engineering Leadership Group IStructE, Chair of Structural Engineers Declaration Steering Group Luke Engleback, Owner, Studio Engleback Sue Riddlestone, Chief Executive, Bioregional

• Edge Debate 127 at Futurebuild

Supply, demand and retrofit – how we overcame all three

- **Chair:** Gillian Charlesworth, Chief Executive, Building Research Establishment (BRE)
- Speakers: Tadj Oreszczyn, Professor of Energy and Environment, UCL Energy Institutes Lynne Sullivan, Member, Green Construction Board and Chair, Good Homes Alliance (GHA)
- Edge Debate 128 at Futurebuild

Living in a sustainable relationship with nature

- Chair:Matt Browne, Advocacy Lead, Wildlife & Countryside LinkSpeakers:Matt Shardlow, Chief Executive, Buglife
Ellen Bradley, Communications and Outreach, Curlew Action
Dr Ruth Waters, Director of Evidence, Natural England, lead scientist, the
Dasgupta Review & co-author of Nature Positive 2030
- Edge Conversation 129 at Futurebuild

The future of building design

 Chair: Hattie Hartman, Sustainability Editor, Architects Journal
 Speakers: Peter Clegg, Senior Partner, Feilden Clegg Bradley Studios
 Hanif Kara, Co-founder and Design Director, AKT II and Professor in Practice of Architectural Technology - Harvard GSD



These sessions were followed in April 2022 by a series of Edge webinars attracting audiences of over 500, organised in collaboration with Futurebuild under the rubric of Big Issues:

• Edge Debate 130 – Futurebuild Big Issues Seminar:

Materials must change

| Chair: | Louise Ellison, CCO, Longevity Partners |
|-----------|--|
| Speakers: | Graham Dodd, Director Materials and Manufacturing, Arup |
| | Will Arnold, Head of Climate Action, IStructE |
| | John Downes, Global Head of Facade Supply Chain, Lendlease |
| | Alison Vipond, Sustainability Lead, Ecology Building Society |

- Edge Debate 131 Futurebuild Big Issues Seminar:
 Climate change is a health emergency so how should we respond?
 Chair: Kristen Guida, Urban Resilience Team, Greater London Authority
 Keynote: Professor Hugh Montgomery OBE, Professor of Intensive Care Medicine, UCL and Director, UCL Institute for Human Health and Performance
 Responses: Maria Dunn, Head of Development Policy Planning and Development, Inclusive Growth, Birmingham City Council Ann Marie Aguilar, Senior Vice President EMEA and IWBI
- Edge Debate 132 Futurebuild Big Issues Seminar: The industry needs to undergo radical change to achieve net-zero and respond to the climate emergency – how should that happen?
 Chair — Keith Clarke, Chair Constructionarium and the Active Ruilding Control

Chair:Keith Clarke, Chair Constructionarium and the Active Building CentreSpeakers:Clare Shine, Director & CEO at Cambridge Institute for Sustainability
Leadership (CISL)
Emma Davies, Principal Sustainability Consultant at Greater Cambridge
Shared Planning Service
Alexandra Notay, Placemaking and Investment Director, PfP Capital
Mark Farmer, CEO, Cast

Edge Debates 2022-23

• Edge Debate 134 - 6th October 2022 – in person Future Cities: What will City 2040 look like

Held in collaboration with Taylor Wessing & UCEM The much delayed launch for the Edge's CITY2040 report published in 2021

Chair: Philip Georgiadis, Financial Times Speakers: Adam Marks, Partner, Taylor Wessing Simon Foxell, the Edge Dr. Katherine Gunderson, CEO, Grand Bequest Ltd Ojay McDonald, CEO, Association of Town and City Management Sarah Allan, Head of Architecture, Department for Levelling Up, Housing & Communities Alistair Watson, Partner and UK Head of Planning & Environment, Taylor Wessing





| Chair: Speakers: | et Zero: A wicked problem? Steven Bee, Consultant and past chair, The Academy of Urbanism Paul Norman, Clarion Housing Group Esther Robinson Wild, Robinson Wilde Consulting Crispin Edwards, Historic England Peter A. Cox, Carrig Conservation International Anna Beckett, Symmetrys Chris Jofeh, Consultant to Arup and Chair of the independent Decarbonisation of Homes in Wales Advisory Group |
|---------------------------------------|--|
| Edge Debate | • 136 - 27th February 2023 – online |
| Housing Ada | ptability: More than (but essential to) climate issues? |
| Held in collat | poration with Buildings & Cities (B&C) journal |
| Chair: Speakers: | John Palmer, Department for Levelling Up, Housing & Communities, UK Elanor Warwick, Clarion Housing Group, UK Jyrki Tarpio, Tampere University, Finland Astrid Smitham, Apparata Architects, UK Marta Smektala, Wroclaw University of Science and Technology, Poland Kirk Archibald, Director, Think Three, UK Amy Burbridge, Head of Master Development and Design Team, Homes England, UK Philip Graham, University of Cambridge, UK |
| Edge Debate | • 151 - 13th July 2023 – in person |
| Leadership fo | or sustainability in the built environment |
| Held in collab | poration with UCEM |
| Introduction: Keynote: Keynote: | Robin Nicholson, Convenor, the Edge Ashley Wheaton, Principal, UCEM Hannah Vickers, Construction Leadership Council & Chief of Staff – MACE Madeleine Gabriel, NESTA |
| Panel 1: | Accepting the Challenge – setting targets |
| Chair: Speakers: | Smith Mordak, CEO, UKGBC Hero Bennett, Head of Sustainability, Max Fordham Joe Jack Williams, Partner FCBS Andy Nolan, Director of Development and Sustainability, Nottingham University |
| Speaker: | Chris Twinn, TwinnSustainabilityInnovation, NZCBS Governance Board |
| Panel 2: | Defining sustainability leadership |
| Chair: Speakers: | Amanda Clack, Partner & Regional CEO, HKA Guy Grainger, Global Head of Sustainability & ESG, JLL Ruth Voigt, Environmental Sustainability Leader, Laing O'Rourke Kayla Friedman, Cambridge Institute for Sustainability Leadership |
| Speaker: | Claire Neale, Service Line Director, Nature Based Solutions, Atkins |
| Panel 3: | Achieving and managing performance |
| Chair: | Sara Edmonds, Co-Director retrofit Hub and co-founder Architects Climat Action Network (ACAN) |
| Speakers: | Jessica Broomhall, Sustainability & ESG, ICG Penny Gowler, Director & Head of Sustainability, Elliott Wood |

Futurebuild 2023 Debates

the Edge was back at the Excel Centre in March 2023 with a conference programme under the heading of Taking a Stand:

Day 1 – Looking Forward: Tuesday March 7th 2023

• Edge Debate #137 at Futurebuild

Big Energy Debate: 100% renewables are needed to reduce global heating

| Fiona Harvey, Environment Correspondent, The Guardian |
|--|
| Sam Gardner, Head of Climate Change & Sustainability, Scottish Power |
| Libby Peake, Head of Resource Policy, Green Alliance |
| Paul Ekins, Professor of Resources and Environment Policy Bartlett |
| Helena Rivers, Director, AECOM and Vice President IMechE |
| |

- Edge Debate #138: at Futurebuild
 Facing challenges: Learning lessons, being prepared
 Chair: Fiona Harvey, Environment Correspondent, The Guardian
 Speakers: Brooke Rogers, Professor of Behavioural Science and Security, King's College London

 Beccy Speight, Chief Executive Officer, The Royal Society for the Protection of Birds
 Paul Ruyssevelt, Professor of Energy and Building Performance, Building Stock Lab Leader, UCL Energy Institute, UCL
- Edge Debate #139: at Futurebuild

Activism: Act now, or face extinction

- Chair: Ben Goldsmith, Chair, Conservative Environment Network and Chief Executive, Menhaden Plc
 Speakers: Sara Edmonds, Coordinator, Architects Climate Action Network (ACAN) and Director at Studio seARCH Kat Scott, Low Energy Transformation Initiative (LETI) and Sustainability & Regenerative Design Manager, dRMM Architects Smith Mordak, Built Environment Declares and Director of Sustainability and Physics at Buro Happold Dr Amy McDonnell, Campaign Director, Zero Hour and a co-author of the Climate and Ecological Emergency Bill
- Edge Debate #140: at Futurebuild
 Futurebuild debate: Rebuild or Retrofit: Planning and Whole Life Carbon
 Chair: Isabel Allen, Editor, Architecture Today
 Speakers: Estelle Dehon, KC, Cornerstone Barristers Peter Fisher, Director, Bennetts Associates Matt Richards, Planning Director, Planning Residential and Business Space, Savills

Jo Bacon, Partner, Allies and Morrison



Day 2 - Changing: Wednesday March 8th 2023

- Edge Debate #141: at Futurebuild
 The Big Behaviour Debate: Changing our professional and personal behaviour so we can live within planetary boundaries
 Chair: Dr Viktoria Spaiser, Associate Professor in Sustainability Research, University of Leeds
 Speakers: Daniel Zeichner, MP, Vice Chair of the All-Party Parliamentary Group (APPG) for Future Generations
 Anna Burrows, Chief Executive, See It, Be It
 Dr Christian Spielmann, Reader of Economics Education, University of Bristol
 Dr Niamh Murtagh, Principal Research Fellow, Bartlett School of Sustainable Construction, UCL
- Edge Debate #142: at Futurebuild
 Facing Challenges: Change management
 Chair: David Partridge, Chairman Related Argent and Governance Board
 Chair, Net Zero Building Standard
 Elspeth Kirkman, Chief Programmes Officer, NESTA
 Mark Farmer, Chief Executive, Cast Consultancy
 Andrew Simms, Coordinator of the Rapid Transition Alliance and codirector of the New Weather Institute

Edge Debate #143: at Futurebuild Activism: Understanding social change Chair: Areeba Hamid, Joint Executive Director, Greenpeace

Speakers: Dr Jennifer Rudd, Senior Lecturer in Innovation and Engagement, University of Swansea Nicola Kench, Director, Groundswell Ecosystems Professor Mark Gillott, Chair in Sustainable Building Design, Department of Architecture & Built Environment, University of Nottingham Charles Bradshaw-Smith, CEO, SmartKlub Ltd.

Edge Debate 144: at Futurebuild Wise heads: Time for reflection and inspiration for change Chair: Baroness Parminter, Chair of the House of Lords Environment and Climate Change Committee Speakers: Lewis Akenji, Managing Director, Hot or Cool Institute Paul Chatterton, Professor of Urban Geography, University of Leeds;

member of the Rapid Transition Alliance and author of the forthcoming How to Save the City: a guide for emergency action. Jane Manning, Director, Allies and Morrison Urban Practitioners

Day 3 – Taking Action: Thursday March 9th 2023

Edge Ministerial Keynote #145: at Futurebuild
 Speaker: Trudy Harrison, Government post of Parliamentary Under-Secretary.
 Department of Environment, Food and Rural Affairs

| • | Edge Debate #146: at Futurebuild | | | | |
|---|----------------------------------|--|--|--|--|
| | The Big Natu | re Debate: Our contract with nature for a nature positive world | | | |
| | Chair: | Dame Fiona Reynolds, former Master of Emmanuel College Cambridge | | | |
| | | and former Director-General of the National Trust | | | |
| | Speakers: | Craig Bennett, Chief Executive, The Wildlife Trusts | | | |
| | | James Alexander, Chair, Finance Earth | | | |
| | | Jenny Merriman, Technical Director, WSP | | | |
| | | Richard Benwell, Chief Executive, Wildlife and Countryside Link | | | |

• Edge Debate #147: at Futurebuild

Facing Challenges: Edge Policy Proposals

- Ben Westerman, Head of Policy, Aldersgate Group Chair: Speakers: Simon Foxell, The Edge and Principal, The Architects' Practice Antonia Jennings, Associate Director, Centre for Local Economic **Strateaies** Sophie Beagles, Principal Regeneration Officer, Ealing Council and Learning Facilitator, Public Practice Martin Baxter, Director of Policy and External Affairs, IEMA Pete Winslow, Director, Expedition Professor Elena Marco, Pro Vice-chancellor and Head of College of Arts, Technology and Environment at the University, West of England (UWE) Fabrizio Varriale, Space and Place Analyst, RICS Dr Martina Girvan, Green Construction Board (Biodiversity Working) Group) and Senior Technical Director-Ecology, Arcadis Marianne Heaslip, Technical Lead, People Powered Retrofit
- Edge Debate #148: at Futurebuild

Activism: Teaching the new curriculum: education is key to positive action on climate and ecological breakdown

Chair: Keith Clarke, Intercity Development Partners - Partenaires de Développement Interurbain and Chair of Constructionarium
 Speakers: Eleanor Andrade May, Student volunteer, Teach the Future

Speakers: Eleanor Andrade May, Student volunteer, Teach the Future Zoe Arnold, Campaigns Manager - Education, Students Organising for Sustainability (SOS-UK) Dr Neal Shasore, Head of School and CEO, London School of Architecture Dr Jenny Russell, Director of Education and Learning, Royal Institute of British Architects (RIBA)

Edge Conversation #149: at Futurebuild
 What have we got right? Which exams have we passed? What are our re-sits? Are we heading for expulsion? What next?

Chair: Sara Edmonds, Coordinator, Architects Climate Action Network (ACAN) and Director, Studio seARCH

Speakers: Mark Maslin, Professor of Earth System Science, University College London and author of How to save our planet: the facts Lara Young, Head of ESG, Cromwell Property Group Smith Mordak, Director of Sustainability and Physics, Buro Happold

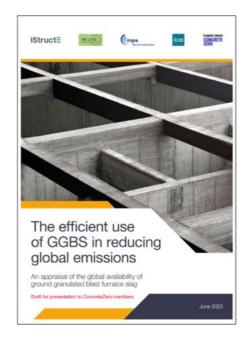


Edge Roundtables

the Edge roundtable sessions bring small groups of informed people together to focus on knotty policy issues, provide expert briefings and hammer out solutions:

Edge Roundtable, 26th October 2021 • The Roadmap to Absolute Zero for Cement Held in collaboration with LETI and IStructE Introduction: Jane Wernick, engineersHRW & the Edge Will Arnold, Head of Climate Action, **Speakers:** IStructE Chris Twinn, TwinnSustainabilityInnovation & LETI Karen Scrivener, Ecole Polytechnique Fédérale de Lausanne Sam Draper, Seratech Elaine Toogood, Director, Architecture and Sustainable Design, The Concrete Centre

This event was the catalyst that led to The Efficient use of GGBS in reducing global emissions paper issued by IStructE and other organisations in June 2023



Edge Roundtable 118, 10th December 2021 Exploring Levelling up

Held in collaboration with the Planning Team at the Department for Levelling Up, Housing & Communities (DLUHC)

| Chair: | Robin Nicholson, Convenor of the Edge, Chair of the CQP & Partner, Cullinan Studio |
|-----------|--|
| Speakers: | Cullinan Studio Joanna Averley, Chief Planner, DLUHC Rose Grayston, New Economics Foundation and lead author of No Place Left Behind: The Commission into Prosperity and Community Placemaking, 2021 Jon Rouse, City Director, Stoke on Trent John Goddard, Professor Regional Development Studies, Centre for Urban and Regional Development Studies (CURDS), University of Newcastle Rhiannon Corcoran, Professor of Psychology & Public Mental Health, University of Liverpool Kat Deeney, Natural Infrastructure Manager, Plymouth City Council David Cowans, Former CEO, Places for People Jenny Raggett, Project coordinator, Transport for New Homes Martin Ellerby, Chair, Forum for the Built Environment (Greater Manchester) |
| | Marianne Heaslip, URBED |

• Edge Roundtable 133, 30th June 2022 Education #1

Are new entrants to built environment courses adequately informed and prepared for the climate and ecological challenges that they will be dealing with in both their training and careers?

- Chair: Jane Davidson, Pro Vice-Chancellor Emeritus, University of Wales Trinity Saint David
- Speakers: Jon Bootland, Director Sustainable Development Foundation James Norman - Professor of Sustainable Design. Department of Civil Engineering, University of Bristol Dr Lizzie Rushton, Associate Professor and Research Lead, UCL Centre for Climate Change and Sustainability Education Josh Tregale, Mechanical Engineering Student and Climate Activist Jamie Agombar, Executive Director of Students Organising for Sustainability (SOS-UK) Emma Crichton, Head of Engineering at Engineers Without Borders Participants: Laura Webb, Director of Membership, Chartered Institution of Building Services Engineers (CIBSE) Andrew Close, Director of Education and Profession, Royal Town Planning Institute (RTPI) Séan Harris, Director of Membership, Institution of Civil Engineers (ICE) Alex Whitcroft, The Climate Framework and Director, KIN Aled Williams, Executive Director: Innovation and Partnerships, UCEM Juliet Upton, Head of Education and Skills Policy, Royal Academy of Engineering

Julia Stevens, CEO, Constructionarium

Nick Ford, Design Engineer, Pipsqueak Developments Mike Cook, Chair, Climate Emergency Task Group, IStructE

• Edge Roundtable 152, 19th June 2023 Retrofit Proposals

A meeting convened by the Edge that brought together several active organisations within the built environment sector to discuss the role of retrofit in the CCC's developing strategy.

Chair: Robin Nicholson, Convenor, the Edge Participants: Ramesh Deonarine, CCC, Team Lead, Built Environment – Buildings Chris Twinn, LETI Rob Cohen, LETI Lynne Sullivan, Chair, National Retrofit Hub Sara Edmonds, Co-Director, National Retrofit Hub & Co-Founder ACAN Louise Hutchins, UK Green Building Council Simon Foxell, the Edge Sue James, the Edge Observers; Tom Nomico, Building Centre John Bonning, Building Centre



• Edge Roundtable 153, 6th July 2023 Education #2

An introductory Roundtable discussion about undergraduate education for built environment professionals to discuss:

- Do we need to completely reform undergraduate education for the built environment?
- What needs to be achieved? and
- How can this be done?

Chair: Jane Wernick, consultant engineer, the Edge

Participants: Patrick Bellew, Founding Director - Atelier ten Baroness Julia Brown, Chair - CCC Adaptation Committee and UK Low Carbon Business Ambassador Claudia Carter, Professor of Environmental Governance and Planning -Birmingham City University Keith Clarke, Chair - Intercity Development Partners, Toronto, Chair -Constructionarium Ltd, Chair - Royal Academy of Engineering working group on Sustainability in Engineering Higher Education, the Edge Dr Ana Rute Costa, Course Leader Architecture - Lancaster University Marianna Coulentianos, Lecturer - School of Design and Creative Arts, Loughborough University, Co-director of Research - the Post Growth Institute Estelle Dehon, KC, Cornerstone Barristers. Heba Elsharkawy, Associate Professor and Head of Department of Architecture and Landscape - Kingston School of Art Dr Rachel S. Fisher, Associate Professor - School of Engineering, University of Birmingham Ben Gallant, Research fellow - The Centre for the Understanding of Sustainable Prosperity, University of Surrey Ben Goodwin, Head of Policy - IEMA Ciaran Malik, Structural Engineer, ACAN Coordinator, the Edge Mark Nason, Head of Professional Practice - CIEEM Dr Jenny Russell, Director of Education and Learning- RIBA Nick Russell Consultant - Perega Ltd, Past President - IStructE Dr Neal Shasore, Head of School and CE - London School of Architecture Hugh Simpson, CE and Registrar - Architects Registration Board Julia Stevens, CE - Constructionarium Dan Tram, Senior Engineer - Arup Josh Tregale, Climate Campaigner and Mechanical Engineering Student - Imperial College Katy Turff, Head of Professional Standards - Engineering Council Alex Whitcroft, Co-founder and director - KIN Dr Wei Yang, Chair - Wei Yang & Partners, CEO - Digital Task Force for Planning, Past-President RTPI, Chair - CIC, the Edge **Observers:** Simon Foxell, Principal - The Architects Practice, the Edge Sue James, Chartered Architect, Convenor TDAG, the Edge Robin Nicholson, Convenor - the Edge Lynne Sullivan, LSA Studio, Chair - Good Homes Alliance, Chair - National Retrofit Hub Interim Board, the Edge Michelle Wang, EMEA Sustainability Manager - Deloitte, the Edge

Records of and recommendations from the Edge roundtables are available on the Edge's website: www.edgedebate.com

CIC Climate Action Plan

the Edge continues to support the CIC's Climate Action Plan: Carbon Zero and is currently coordinating Workstream 10 of the Action Plan on Competence, Ethics and Advocacy.

Under Workstream 10 the Edge is developing a proposed BSI Flex document for a Built Environment – Core criteria for sustainability in competence frameworks – Code of practice, working with the Department of Business and Trade as well as a wide range of representative bodies in the sector.



the Edge will continue to work with all parties to ensure that the built and natural design professions and organisations are prepared and better able to deliver net zero carbon solutions.

Policy Proposals for the Built and Natural Environment

In mid-2022 tapping into the extensive expertise of its members the Edge began to assemble a collection of policy ideas across different sectors of the UK economy all of which it believed were necessary if the country was going to meet the urgent climate and nature restoration objectives that have been set. The proposals were published in November 2022 and can be downloaded from

https://edgedebate.com/s/theEdge_PolicyProposals_1122.pdf.

Following publication the Edge has been discussing and consulting widely on the proposals in meetings with politicians, advisers, civil servants, professional bodies, lobbying organisations and many others. They have been the subject of a session at Futurebuild (see above) as well as many individual presentations.



Consultations and responses:

The Edge has responded to a number of consultations in 2021-23:

- to the Department for Education on: Sustainability and Climate Change Education -Strategy for education and children's services systems
- to the National Infrastructure Commission: in response to the Second National Infrastructure Baseline Report
- to the House of Lords Inquiry into Land Use in England
- to the Independent Review of Net Zero, chaired by Chris Skidmore MP and commissioned by the Department of Business, Energy and Industrial Strategy
- to the Department of Levelling Up, Housing and Communities (DLUHC) on: the Levelling Up and Regeneration Bill: Reforms to National Planning Policy
- to the RICS on: The Whole Life Carbon Assessment for the Built Environment, RICS Professional Standard, 2nd Edition

These responses are available at https://edgedebate.com/edge-responses.

Future Activities

The Edge is currently working on the Conference programme for Futurebuild at the Excel Centre in March 2024 co-ordinated by Edge member Sue James.

A series of Edge Debates and Roundtables are planned for the Autumn and New Year including roundtables on Planning for Net Zero with DLUHC (September) and the Costs of Infrastructure Delay for the NIC (November)

The Edge will continue to work with the CIC and the wide range of signatory bodies on the implementation of Carbon Zero: the professional institutions' climate action plan.

<u>Linkages</u>

the Edge works at the intersection of the construction industry professions, research bodies and policy-making groups inside and out of government. Its members maintain regular contact with professional and academic bodies, technical and campaigning organisations and central and local government departments. Members of the Edge also teach and lecture widely, both in the UK and abroad as well as being active professionally in the design and delivery of significant projects across the world

Members of the Edge continue their active involvement with sponsoring construction and built environment institutions as well as other groups including; the Academy of Urbanism, Active Building Centre, All Party Parliamentary Climate Change Group (APPCCG), All-Party Parliamentary Design & Innovation Group, Architects Climate Action Network (ACAN), British Property Federation, Building Regulations Advisory Committee (BRAC), Cambridgeshire Quality Panel, Conservative Environment Network, Constructionarium, Design Commission for Wales, Design Council CABE, Good Homes Alliance, Green Construction Board, Greenpeace, LETI, National House-Building Council (NHBC), National Retrofit Hub, National Trust, Place Alliance, Royal Academy of Engineering, Royal Town Planning Institute, the RSA, Sustainable Development Foundation, Trees and Design Action Group, University College of Estate Management (UCEM) and the UK Green Building Council.

the Edge has close links with a range of UK research bodies including the Bartlett Schools of Environment, Energy and Resources and Planning, Cambridge University Engineering Department Centre for Sustainable Development, Imperial College London, School of Construction Management and Engineering University of Reading and the UCL Energy Institute.

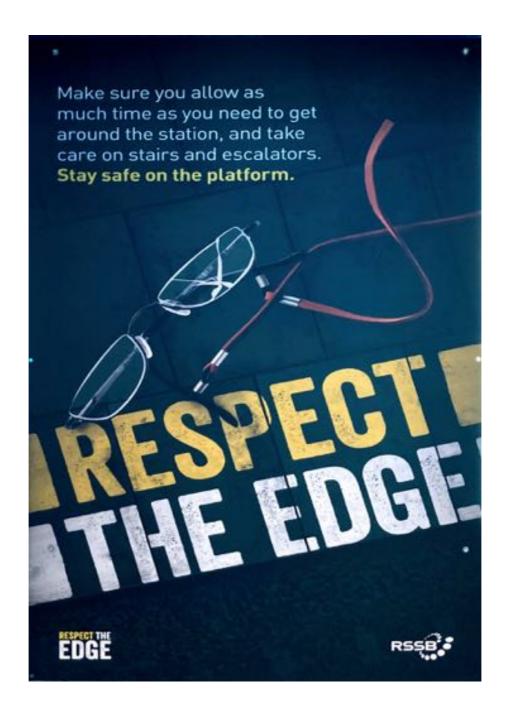
The Edge supports The Place Alliance and Teach the Future.

Edge Support & Funding

the Edge runs without external funding and is dependent on the goodwill and contributions of its members, their employers and the Edge's partner organisations (the RIBA, ICE, CABE, CIAT, CIBSE, CIC, CIHT, CIOB, IStructE, LI, SocEnv, RICS, The Building Centre and UCL Energy Institute). In the recent past the Edge has been funded by The Ove Arup Foundation and The Carbon Trust. The City 2040 work completed in 2021 was generously supported by Taylor Wessing and supported by UCEM.

the Edge benefits greatly from the time provided by a range of senior members of the construction professions including architects, engineers, surveyors, planners, social scientists and others, including current and former presidents and vice presidents from the professional institutions who are active as part of the Edge.

the Edge is currently actively seeking support for 2024 and beyond in order to continue and develop its activities, in particular the Edge debates and the work of the research Edge. Please contact Simon Foxell of the Edge at contact@edgedebate.com if you are interested in discussing this further.



Reporting

In 2019 the Edge published its Good Practice Reporting Standard for consistent reporting of basic institutional data.

Data on the Edge's membership in July 2023 is at follows:

| Members | Male | Female | Non- binary | Total | M% | F% | NB% |
|---|--------------------|---------------|----------------|-------------------|--------------------|-----------------|------------|
| Active members | 32 | 30 | 1 | 63 | 51% | 48% | 2% |
| Emeritus members | 16 | 3 | | 19 | 84% | 16% | 0% |
| TOTAL | 48 | 33 | 1 | 82 | 59% | 40% | 1% |
| | | | | | | | |
| Membership Gains/losses | Male | Female | Non- binary | Total | M% | F% | NB% |
| Membership Gains/losses Committee members | Male (1) | Female | | Total 7 | M% (-1%) | F% 9% | NB% |
| | | | | | | | |

| Geography (office address) | London | Rest England | Scot/ Wales | Internati | Total |
|----------------------------|--------|-----------------|----------------|-----------|-------|
| Committee members | 45 | 16 | 1 | 1 | 77% |
| Emeritus members | 6 | 9 | 2 | 2 | 23% |
| TOTAL | 51 | 25 | 3 | 3 | 82 |
| % | 62% | 30% | 4% | 4% | 100% |

| Ethnicity (ONS categories) | White | Asian/ AB | B/A/C/ BB | Other | TOTAL |
|----------------------------|-------|--------------|--------------|-------|-------|
| Committee members | 60 | 3 | | | 56 |
| Emeritus members | 17 | 1 | 1 | | 19 |
| TOTAL | 77 | 4 | 1 | | 82 |
| % | 94% | 5% | 1% | 0% | 100% |

| Debate speakers | Male | Female | Non- binary | Total | Μ% | F% | NB% |
|--------------------------------|------|--------|----------------|-------|-----|-----|-----|
| Futurebuild 22 | 26 | 22 | | 48 | 54% | 46% | 0% |
| Futurebuild 23 | 26 | 33 | 1 | 60 | 43% | 55% | 2% |
| Futurebuild Big Issue seminars | 5 | 8 | | 13 | 38% | 62% | 0% |
| Edge debates 134, 135, 136 | 14 | 8 | | 22 | 64% | 36% | 0% |
| Edge conference 151 | 7 | 10 | 1 | 18 | 39% | 56% | 6% |
| Edge Roundtables - speakers | 45 | 40 | | 85 | 53% | 47% | 0% |
| TOTAL | 123 | 121 | 2 | 193 | 50% | 49% | 1% |

v.3.1 the Edge, August 2023