



 @CIBSE

# CLIMATE CHANGE

## Action Plan

UPDATED 4 AUGUST 2021



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Many events and reports make it clear that we collectively need to do more to reduce carbon emissions and prepare for the impacts of climate change. In the UK, this means taking actions that will contribute to the legal target of achieving net zero status by 2050.

CIBSE's activities are driven by its charitable mission. CIBSE has been active for many years in promoting policies and measures to mitigate climate change, to adapt our buildings to the changing climate and to establish the critical link between how buildings perform in operation and their carbon impact.

To increase our efforts, in July 2019 CIBSE produced its first Climate Action Plan, mapping our current and planned activities in the areas where we have a duty and the ability to act:

- Our role as professional institution: setting codes of professional conduct and collaborating with other professional institutions and organisations
- Practicing what we preach
- Education: working with education bodies, and through the courses we accredit
- Awards, events and dissemination
- Training and professional development
- Research: supporting the continuing development of knowledge and understanding, and helping the dissemination of that research
- Policy: providing advice and advocacy for better building performance outcomes and a transition to net zero carbon
- Guidance: supporting our members from the strategic level and setting of targets through to detailed delivery, monitoring and evaluation.

On its first issue, we committed to review our plan regularly. This is the second annual update.

This plan has been informed by input from members, other professional institutions and the wider industry. Please send us your comments on how we could help you and where you could support our activities by contacting Julie Godefroy, Head of Sustainability [JGodefroy@cibse.org](mailto:JGodefroy@cibse.org).

You can also view a [webinar](#) on our action plan.

<b>AHEP</b>	Accreditation of Higher Education Programmes
<b>AM</b>	Application Manual
<b>ASBP</b>	Alliance for Sustainable Building Products
<b>BEIS</b>	Department for Business, Energy and Industrial Strategy
<b>BPN</b>	Building Performance Network
<b>BSERT</b>	Building Services Engineering Research & Technology journal
<b>CCC</b>	Climate Change Committee
<b>CIC</b>	Construction Industry Council
<b>COP</b>	Conference of Parties (UN Climate Change Conference)
<b>CP</b>	Code of Practice
<b>CPD</b>	Continuing Professional Development
<b>DEC</b>	Display Energy Certificate
<b>ICE</b>	Institution of Civil Engineers
<b>IStructE</b>	Institution of Structural Engineers
<b>LETI</b>	London Energy Transformation Initiative
<b>MHCLG</b>	Ministry of Housing, Communities and Local Government
<b>NZEB</b>	Nearly Zero Energy Buildings
<b>RAEng</b>	Royal Academy of Engineering
<b>RdSAP</b>	Reduced SAP
<b>RIBA</b>	Royal Institute of British Architects
<b>RICS</b>	Royal Institution of Chartered Surveyors
<b>RTPI</b>	Royal Town Planning Institute
<b>SAP</b>	Standard Assessment Procedure
<b>TCPA</b>	Town and Country Planning Association
<b>TM</b>	Technical Memorandum
<b>UKCP18</b>	UK Climate Projections 2018
<b>UKGBC</b>	UK Green Building Council

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### KEY

- ▶ Current activities
- 📄 **New activities and progress from last year**
- ▶ Plans for further action
- 🔴 Possible further activity, to be explored – members feedback welcome

### AS A PROFESSIONAL INSTITUTION

- ▶ [Code of Professional Conduct](#), including the requirement that: “Members shall promote the principles of sustainability and seek to prevent avoidable adverse impacts on the environment and Society”
- ▶ [Annual report](#) on our activities
- ▶ Collaboration on industry-wide guidance e.g. RIBA Plan of Work
- ▶ Signatories to the 2019 [cross-industry pledge coordinated by the Edge](#), committing us to urgent and concerted action on climate change
- ▶ 📄 Members of the CIC Climate Change Committee; we **contributed to and signed up to the cross-industry climate action plan, and are coordinating workstream 7 on in-use performance. We have committed to produce a dated implementation programme by COP26.**
- ▶ Seeking to increase awareness of the CIBSE Code of Conduct e.g. promotion in 2020 Guide L; further suggestions from members are welcome e.g. one-pager on benefits for clients?
- ▶ Gap analysis and working towards [the Edge reporting standard](#) for professional institutions
- 🔴 Introduce obligations or strong recommendations for members to offer a Net Zero option on all their projects?
- 🔴 Engage with international organisations e.g. Built Environment Advisory Group?
- 🔴 Participate in the work of the Federation of European Heating and Ventilating Associations (REHVA) on decarbonising buildings?

### PRACTICING WHAT WE PREACH - OUR BALHAM OFFICE AND ACTIVITIES

- ▶ Energy efficiency measures and monitoring our performance in our office.
- ▶ 📄 Disclosure of performance: voluntary Display Energy Certificate, December 2019. We have not updated this in 2020-21 2021 due to unusual occupancy patterns during lockdown. **We plan to produce an updated DEC once occupancy has returned to a “new normal”; to maximise learning for our members we will also consider whether to produce an Operational Rating under the Government’s new scheme for commercial offices, once available.**
- ▶ Fuel cell serving our office since 2015, with [public reporting on operation and performance](#)
- ▶ [Sustainability policy](#) covering our activities, events, premises, staff, procurement and transport
- ▶ 📄 **New, easier reporting of transport data on our expense forms, allowing us to analyse our carbon footprint beyond our office building.**
- ▶ 📄 **Investment portfolio moved to an Ethical Investment Fund, as of 1st July 2021. This applies a number of exclusion and restriction criteria to investments in companies deriving their revenues from fossil fuels and electricity generation.**
- ▶ Improvement plan for our offices, for better energy efficiency, summer comfort, health and wellbeing of staff – some implemented, others under review due to the pandemic and possible future ways of working.
- ▶ 📄 Better use the opportunities of Balham to test and demonstrate improvements in the performance of existing buildings; working group exploring feasibility of achieving net zero carbon for our office building – **being examined as part of overall CIBSE office strategy, including post-pandemic future ways of working.**

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### EVENTS, DISSEMINATION AND AWARDS

- ▶ Regular reporting on zero-carbon agenda in CIBSE Journal, blog, newsletter and website and in articles for other media and organisations
- ▶ Regular coverage of zero-carbon agenda at CIBSE events and [online webinars](#)
- ▶📄 Since 2012, requirement for in-use performance data for the CIBSE awards; [CIBSE Journal publication of initial analysis of performance data from past awards, and how they relate to best practice industry targets; new data entry form to facilitate entry by applicants and improve the quality and consistency of data collected; in the future this may also offer opportunities for showcasing projects in CIBSE benchmark database.](#)
- ▶ Continued working with RIBA to align the sustainability criteria in our awards and to enable RIBA awards in-use data to feed into CIBSE benchmarks database
- ▶📄 **New Embodied Carbon Award**
- ▶📄 Seek more alignment with other institutions on sustainability awards e.g. with IStructE and ICE on embodied impacts; **CIBSE representative on UKGBC proposals for COP26 representations, including pavilion & exhibition**

### POLICY

[www.cibse.org/news-and-policy/policy](http://www.cibse.org/news-and-policy/policy)

- ▶ Regular input to policy consultations (e.g. Building Regulations / Future Homes & Future Buildings Standard, retrofit, energy efficiency, low-carbon heat, operational ratings). [Joint industry letter to Secretary of State in response to Future Buildings Standard consultation](#)
- ▶📄 **Part of project team on SAP/RdSP11 scoping project for BEIS – [report available here](#)**
- ▶ [Position statements and briefings](#) including net zero carbon buildings, planning, overheating, green recovery.
- ▶ Member of government working groups e.g. Part L, Part F and overheating, operational ratings; support to the work of the Climate Change Committee
- ▶📄 Collaboration with others to align our policy recommendations where possible, including BPN, LETI, UKGBC, RIBA, and RTPI. **Part of the RAEng National Energy Policy Centre, and the steering groups of UKGBC Net Zero Roadmap and RTPI / TCPA Planning and Climate Change guide.**
- ▶ Signatory to [joint BPN statement on regulations for operational performance](#); on-going work with the Building Performance Network on advocating more attention to in-use performance in policy and regulations
- ▶📄 **Support to [call for regulating embodied carbon, and input to working group](#)**
- ▶▶ Plan to produce a position statement on retrofit
- 🔴 Update the position statement on system capacity?
- 🔴 Produce a position statement on hydrogen?

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### RESEARCH

[www.cibse.org/knowledge/research](http://www.cibse.org/knowledge/research)

- ▶ [Research areas](#) are aligned with strategic CIBSE priorities, including the net zero carbon agenda and climate adaptation. Topics include embodied carbon in building services, circular economy, low-carbon buildings, retrofit, and climate impacts
- ▶ 📄 Publication of [Research Insights](#) including retrofit to NZEB standards, and circular economy principles in building services; **upcoming one on embodied carbon in residential heating systems**
- ▶ Member of the advisory board for the Centre for Research into Energy Demand Solutions (CREDS), and Chairing the advisory board of the Centre for Doctoral Training (CDT) in Energy Resilience and the Built Environment (ERBE) and chairing the Advisory Board for the Low Temperature Networks research programme (LoT-NET).
- ▶ 📄 **New Knowledge Transfer Partnership to update CIBSE weather files based on the latest UKCP18 climate projections**
- ▶ Explore other topic areas e.g. ground source heat pumps, and further collaboration opportunities
- 🔴 BSERT Special Issues e.g. zero carbon, retrofit

### EDUCATION

- ▶ 📄 **Contributed to the joint industry [Climate Framework curriculum](#)**
- ▶ 📄 **Updating our guidelines for CIBSE accreditation of engineering courses, to reflect more emphasis on climate change and the Climate Framework. The guidelines, once approved, will be introduced along with AHEP4. AHEP4 will be implemented through a transition period starting January 2022 and ending September 2024.**
- ▶ CIBSE support to the [RAEng Centres of Excellence in sustainable building design](#) – Plan to re-invigorate them

### COMPETENCE AND TRAINING

- ▶ Regular training on low-carbon buildings, overheating, and building performance
- ▶ Low-carbon consultant and Low Carbon Energy Assessor certification schemes
- ▶ Collaboration with others e.g. with ASBP on embodied carbon in building services, with UK Centre for Moisture on moisture and retrofit. We continue to seek opportunities where this offers benefits to industry and our members e.g. retrofit.
- ▶ 📄 **Commitment to introduce mandatory CPD on climate change and safety; we will work with our CPD panel on details and timing of implementation.**
- ▶ 📄 **Commitment to review our corporate grade entry criteria, and how they could better incorporate climate change competence; in 2022 we will create a working group on details and timing of implementation.**
- ▶ 📄 **Plan to carry out a strategic review of our training offer against the net zero agenda, Climate Framework curriculum and latest guidance**

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### GUIDANCE

We keep our guidance under review and aim to represent best practice on low and zero carbon environments.

#### Setting a strategy and objectives towards net-zero:

- ▶📄 Input in RIBA 2030 Sustainability Challenge, **including 2021 update**
- ▶ [Revised Guide L - Sustainability, 2020](#)
- ▶ Part of industry working groups on net zero targets and strategies for retrofit and for a wider range of new buildings
- ▶📄 Online [energy benchmarking tool](#); **2021 updates include updated benchmarks for higher education and prisons, and new domestic benchmarks**
- ▶ Net zero definitions ; Input and support to the 2019 [LETI "one-pager" on new operational net zero carbon buildings](#); planning members engagement on net zero definitions, possibly with the production of guidance e.g. an "explainer" on CIBSE position and recommendations
- ▶📄 On-going development of benchmarking tool e.g. collaboration with others to share data; new categories; highlighting exemplar projects; **part of working group for RICS whole life carbon database**

#### Delivering performance:

- ▶ Extensive existing guidance on low-energy and low-carbon buildings, and climate adaptation (including weather files); mapping of [how our guidance can help deliver net-zero, against the LETI one-pager](#)
- ▶ Collaboration with BSI on standards: PAS framework for retrofit (domestic and non-domestic), and building performance evaluation
- ▶📄 Heat networks: **revised Code of Practice for Heat Networks (CP1)**
- ▶📄 Working group on hot water temperatures for energy efficiency and low-carbon heat; **guidance for instantaneous systems expected in August / September 2021**
- ▶📄 Working group on electrical engineering for net zero; **strategic guidance note expected 2021**
- ▶ Input to the LETI Embodied Carbon Primer
- 📄 **Revised Domestic heating design guide (DBSP), with more on low-carbon systems**
- 📄 **Working with others to explore options for a Net Zero verification / certification scheme; an industry survey to start the work on this was carried out in June-July 2021, led by UKGBC with input from CIBSE and others**
- 📄 **New TM61-64 set on building performance**
- 📄 **New TM65 on assessing embodied carbon of building services products**
- 📄 **New AM16 guidance on heat pumps in large residential schemes - expected 2021**
- 📄 **TM54 on energy performance modelling - being revised**
- ▶▶ Review the status of TM51, depending on other publications being planned by CIBSE and others
- ▶▶ Produce new electrical engineering guidance including benchmarks, plant sizing, demand reduction and management, interaction with the network and with electric vehicles, etc
- ▶▶ Produce new guidance on heat networks: 5th gen / ambient loops, and low-carbon retrofits
- ▶▶ Produce further guidance on reducing and assessing embodied carbon of building services
- ▶▶ Develop our guidance on domestic and non-domestic retrofit, including historic buildings
- 🔴 New guidance on green infrastructure for climate mitigation and adaptation