The voice of our sustainable built environment

ANZ Programme Project Partnership Opportunities 2023 – 2024

Created in 2018 as part of a World Green Building Council initiative, now in its sixth year, UKGBC's Advancing Net Zero programme continues to push to accelerate our sector's decarbonisation journey. It continues to produce leading guidance such as the Net Zero Carbon Buildings Framework, which was the precursor to and supported the drive for the UK Net Zero Carbon Building Standard, currently in development.

Looking ahead, we continue our work to deliver on the ambition set out within the Net Zero Whole Life Carbon Roadmap to secure our pathway to net zero through:

- **Defining** – ensuring consistency and credibility of net zero carbon building claims.
- **Enabling** – building understanding and knowledge through creating guidance and reports to support the construction and operation of net zero carbon buildings.
- **Implementing** – engaging with professionals to help them put net zero carbon building principles into practice.
- **Advocating** – for progressive policy interventions to drive and raise performance across the whole of the market.

Project Partner Opportunities this Programme year

Alongside dissemination, engagement, and other activities – covering areas such as Embodied Carbon Measurement and Reporting, Carbon Offsetting and Pricing, Home and Commercial Retrofit, Finance and Valuation, Ci, and Renewable Energy Procurement – our intention is to begin at least two new projects in this year, strongly aligned with enabling practical action to accelerate progress towards net zero. These two projects are as follows:

1. **Non-domestic retrofit cost and energy use evaluation (building typologies TBA)**
2. **Building Optimisation: Action Learning Labs**

Summary of Project Partner Benefits:

Beyond advancing our shared ambitions and supporting the realisation of critical industry targets, members partnering on projects will also gain multiple direct benefits including:

Drive Meaningful Impact	• Credited with enabling the project and guaranteed space on the project group • Taking a steering role, helping to shape the project, its outputs, and how these are conveyed
Raise your Brand Profile	• Inclusion of your organisation's logo on all project-related outputs and collateral • Bespoke social media assets to help promote your organisation's support of the project • Opportunities to present at project output launch and/or related events
Extend your Network	• Collaborate with other industry leaders • Access to a broad network through which to extend your reach and build new relationships
Develop your Staff	• Individuals will gain unique experience and improve their knowledge • Engage with a diverse set of stakeholders and collaborate to co-create tangible solutions

Please note becoming a Project Partner is only open to UKGBC members. To find out more about becoming a member, visit our Membership webpage or get in touch with our Membership team at Membership@ukgbc.org.

1. Closing the Gap towards Net Zero Carbon: Non-Domestic Retrofit

Overview

Building on the learnings and base methodology formed from our current Commercial Retrofit project , and driven by addressing the challenges in accelerating the decarbonisation of the UK's non-domestic buildings, we are seeking to expand this workstream to cover more non-domestic buildings types, further growing the evidence base of the cost and carbon impact of different retrofit measures, and strategies, that offer a pathway towards net zero. Currently, the typologies being considered include:

- **Hotels:** High energy usage; high level of duplication of specific examples (chain hotels); Potentially influence public awareness.
- **Schools:** High potential for social value, education and community engagement; energy costs and poorly maintained facilities are a significant challenge for many schools.
- **Higher Education facilities:** High synergy with offices; opportunity for education and more in-depth research collaboration.
- **Public buildings:** Libraries, Leisure Centres, Local Authority offices, etc.
- **Retail:** Supermarkets, shopping centres, etc.

Objectives

- To deepen awareness and understanding amongst investors, owners, managers, designers, and consultants of the carbon and cost effectiveness of different retrofit measures to inform planned upgrades to existing non-domestic assets; and,
- Explore how to overcome common challenges to maximise compliance with future regulations and to meet the likely ambition behind emerging net zero carbon performance targets.

Outline

1. Develop a suite of evidence that explores and provides the cost, operational energy efficiency potential, and embodied carbon impact (as well as any co-benefits) associated with common retrofit measures for different types of properties, to offer a path of sequential design, operational, and management solutions to set buildings on a path to close the gap to net zero carbon.
2. Focus on one or more non-domestic building typologies based on age, specification standard, HVAC system, and lease type etc. to explore the variety of different challenges faced by stakeholders looking to decarbonise their/their clients' assets.
3. Collate real-world examples of retrofit measures (light, deep, optimisation focused), to illustrate and compare the true impact of different retrofit solutions that facilitate the transition towards net zero, showcasing effective outcomes alongside lessons learnt.

Anticipated Outcomes

- Help strengthen and consolidate the business case for retrofit.
- Enable shared learning and a deeper understanding of the carbon reduction potential and associated cost benefit.
- Leverage key market trends, and focus pressure on Government through defining key policy asks that could further accelerate non-domestic related retrofit strategies.

Number of Anticipated Project Partners: up to 5 partners contributing £5000 each

Anticipated Timeline: October 2023 to March 2024

To discuss further, get in touch with: Tom Wigg, Senior Advisor, tom.wigg@ukgbc.org

2. Operational Building Optimisation: Action Learning Labs

Overview

An important aspect of change needed to achieve the UKs 2050 target is the practical actions to ensure buildings maintain a net zero trajectory over their operational lifetime. An emerging finding of the current UKGBC Commercial Retrofit project is the significance of optimisation. For commercial offices, on average, almost one **third reduction in EUI** can be achieved through optimisation alone (i.e., ensuring the building systems and appliances are operating as efficiently and effectively as possible, and that their operation more accurately aligns with building use – i.e., operating hours and zoning etc.).

While technological solutions play an important part, increased awareness and closer collaboration are essential to ensure building systems can be optimised holistically, with positive impacts on occupant comfort. There is much anecdotal evidence on how optimisation can be achieved but a lack of tangible evidence that illustrates the most common issues and supports understanding of how to resolve them for the long term.

Objectives

Using *UKGBC's Learning Lab format, this project will explore the challenges and solutions associated with reducing and eliminating inefficiencies to drive down energy consumption. It will share the learnings, outcomes, and solutions identified and deepen our shared understanding of how inefficiencies stem from the way buildings currently operate and ways to resolve them. It is currently proposed that the Lab work will have the following key objectives:

- Create a shared and deep understanding of the building optimisation process.
- Identify the challenges faced in the optimisation of buildings to ensure ongoing efficient and net zero-aligned performance in operation.
- Identify practical solutions to challenges for different asset types.
- Produce resources including reports and / or case studies to support.

Key issues that could be investigated include:

- ack of transparency of data, especially energy usage, inappropriate metering of energy;
- lack of detailed understanding of how building systems operate;
- split incentives between landlords and tenants;
- lack of collaboration between landlord and tenant over energy efficiency;
- facilities managers not incentivised or empowered to reduce energy consumption.

Anticipated Outcomes:

- Compendium of experience of how to optimise buildings' energy use.
- Toolkit to support optimisation activities, including the soft skills needed to support mutually beneficial relationships and collaboration between key stakeholders (tenant, landlord, facilities manager etc).
- Increased knowledge and skills base to encourage a focus on optimisation opportunities and solutions.
- Insights into the most appropriate interventions in different situations.
- A shift in thinking that supports an iterative, long-term approach to optimising performance.

Number of Anticipated Lab Partners: up to 9 partners contributing £6500 each

Anticipated Timeline: October 2023 to March 2024

To discuss further, get in touch with: Alex Benstead, Advisor, alex.benstead@ukgbc.org

** UKGBC Learning Labs are collaborative programmes, in which multi-disciplinary teams come together to discuss or work on solutions to a topic and share the experience with their peers. Labs usually comprise a series of workshops over a defined period of time focusing on a specific topic with outputs shared with industry and other relevant stakeholders to support all. Previous examples include Retail Wellbeing Labs and Physical Risk Labs.*