

Net Zero Whole Life Carbon Roadmap for the UK Built Environment

Call for Task Group Applications

Roadmap Context

The UK Government has legislated a goal of reaching net zero carbon by 2050, a move that will require substantial changes in the operations and practices of various sectors. Guidance from the UK Government on achieving this goal for the built environment sector has been minimal despite calls from the CCC and wider industry to provide strategic direction. At the same time, Green Building Councils across Europe are well positioned to develop national decarbonisation roadmaps using the WorldGBC operational and embodied carbon action pathways, thus opening a strategic opportunity for UKGBC to develop a whole life carbon roadmap for the UK built environment in the leadup to COP26.

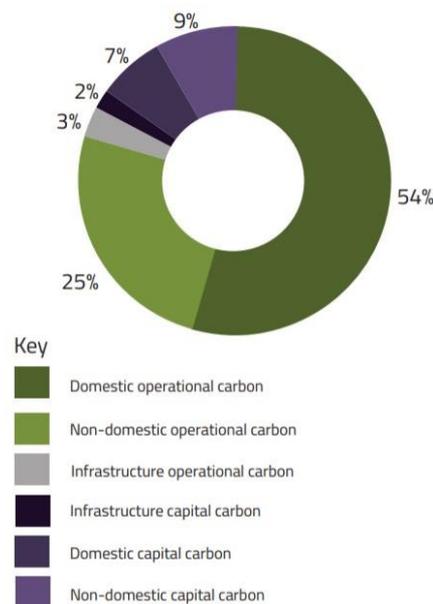


Figure 1: GCB Routemap (2013) - Built Environment Carbon Emission Breakdown (2010)

A Net Zero Whole Life Carbon Roadmap

The UK Roadmap is part of a multi-national project (#Building Life) coordinated by WorldGBC and funded by the Laudes Foundation and Ikea Foundation. The development of national Roadmaps will be led by GBCs across 10 European markets and will aim to build a common vision and agreed actions for achieving net zero carbon in the construction, operation and demolition of buildings and infrastructure.

The UK Roadmap will build on the seminal Low Carbon Routemap published by the Green Construction Board in 2013, which laid out a carbon trajectory for the built environment until 2050 alongside recommended milestones and actions for stakeholders (Figure 1). However, there has been limited further development of the roadmap, apart from an update in 2015 which found that sector emissions were increasing. Multiple interrelated factors have since changed.

The UK Roadmap provides an opportunity to clarify emission scope boundaries, the relationship and interfaces with CCC carbon budget data, and align UK built environment emissions with a 1.5° pathway.

Roadmap Objectives

The overall objective of the UK Roadmap is to develop a timeline of actions and secure the support of relevant market actors in delivering the decarbonisation required, covering the total life cycle impact of the built environment in the UK (Figure 1). The roadmap will be developed in consultation with market stakeholders and policy makers and will be launched with industry endorsement.

Critically, this will be a consensus-based, co-owned process that brings together the key stakeholders from across the built environment life cycle. There will be various opportunities for industry involvement.

The scope of the UK Roadmap includes the entire building life cycle. New and existing buildings, as well as elements of infrastructure, will be covered, with carbon budgets defined for all built environment sub-sectors (Figure 3).



Figure 2: Roadmap sub-objectives

Roadmap Structure

There are two key roadmap components:



Report: A report setting out the actions, policies and processes needed to manage the net zero transition in the built environment, designed to complement the sector-specific roadmaps already in progress and ensure consistency between them. This report would set out the roles and responsibilities that stakeholders will need to take to achieve the end outcome. The report will also identify ways to build capacity across professional communities to drive these actions and manage the sectoral transition, as well as what policies could enable transformation at scale.



Carbon trajectory: A 1.5° aligned science-based trajectory for reducing built environment emissions that includes targets for relevant sub-sectors and can also be applied to new projects. This will form the quantitative underpinning for the report and bring into scope all emissions associated with the construction, operation, and maintenance of the built environment. This will include embodied carbon and more robust approaches to reduce the operational carbon of new and existing assets.

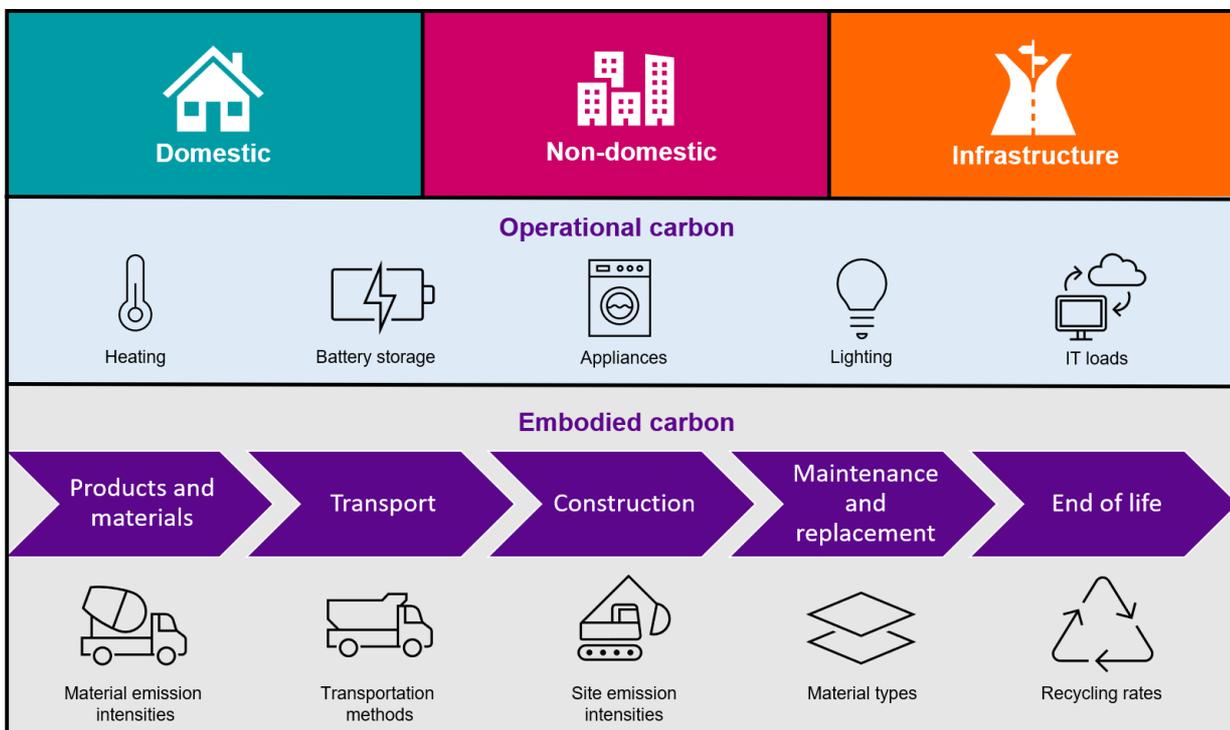


Figure 3: Roadmap scope and examples of intervention points

Steering Group

A Steering Group of industry leaders is being convened to oversee the strategic vision of the Roadmap and build sectoral buy-in. This will be a cross-sector, cross-disciplinary, and diverse group to ensure the outputs created are of long-lasting value and have the support of the built environment industry. The Steering Group will review the outputs and focus on seeking industry endorsements to the vision and objectives of the Roadmap.

Task Groups

The Roadmap outputs will be guided and informed by a wide range of industry stakeholders. In addition to a project Steering Group with broad oversight, several active **Task Groups** will be formed, comprised of approximately **5 - 10 members each**, to lead on specific workstreams.

The Task Group outputs will contribute significantly to the Roadmap's core content and the groups will work towards the following **key objectives**:

1. Review existing industry and government outputs and identify gaps in existing information, along with current and planned relevant research.
2. Identify key technical carbon reduction approaches required for net zero carbon in a given sub-sector (e.g. new build, retrofit, residential, non-residential, etc).
3. Review market drivers, enablers, key decision points, milestones, and target dates.
4. Review policies and regulatory reforms required to drive the net zero transition.
5. Identify key responsibilities across professional disciplines and market actors.
6. Identify data disclosure requirements to enable measurement and monitoring against trajectories.

Task Group Structures and Timeline

Applications to join one of the **four** Task Groups (see below) are now being sought. Whilst the Task Groups are structured around broad topics, focused workshops will be held with each Task Group to explore key aspects of the net zero trajectory.

Table 1: Task Groups and Meeting Dates

Task Group 1 (8-12 people)	Task Group 2 (8-12 people)	Task Group 3 (8-12 people)	Task Group 4 (5-10 people)
New Build - Residential and Commercial (including publicly owned buildings)	Retrofit - Residential	Retrofit – Commercial (including publicly owned buildings)	Infrastructure**
Meeting Dates*	Time	Topics	
Tuesday, March 30 th	2-4pm	Project Kick-off	
Tuesday, April 13 th	2-4pm	Workshop 1	
Tuesday, April 27 th	2-4pm	Workshop 2	
Tuesday, May 11 th	2-4pm	Workshop 3	
Tuesday, May 25 th	2-4pm	Workshop 4	
Tuesday, June 8 th	2-4pm	Review draft prior to public consultation	
Tuesday, August 3 rd	2-4pm	Review final draft	

* Please note that the dates of the meetings may be subject to change. We will alert Task Group members to any changes as soon as possible.

**Infrastructure scope boundaries within the Roadmap are one of the early focus areas of both the Steering Group and the Infrastructure Task Group. Following this initial focus on scoping, the direction and topics of the infrastructure workshops will be reviewed and developed with the Infrastructure Task Group.

A key tenet of the Roadmap is that it will build on existing industry and government research and outputs. We will therefore be seeking a level of knowledge and understanding of existing / emerging related industry initiatives within the Task Groups, for example, CCC Carbon Budget methodology reports, LETI Climate Emergency Design Guide, RIBA 2030 Climate Challenge, CLC national retrofit strategy, Infrastructure carbon review, etc.

Task Group Criteria

Applications are being sought from within the UKGBC membership and across the real estate, design and construction industry, covering a broad range of experience and knowledge of key issues, for example:

- Existing and emerging industry and academic research, consultation, evidence, and policy recommendations in support of a net zero built environment.
- Technical feasibility and implementation challenges for domestic retrofit.
- Insulation and heat-pump implementation.
- Commercial and public building retrofit opportunities.
- Existing building facilities management and energy optimisation.
- Market incentivisation, regulation and the role of green finance.
- New build performance standards and data disclosure.
- Design approaches to minimise whole-life carbon of new development.
- Low carbon construction materials and supply chain innovation.
- Skills, training and education.

Applicants are encouraged to indicate their preferred Task Group(s), expected to align with their area of expertise. It is expected that applicants will have a **minimum 5 years of relevant experience, or specific knowledge within a topic area**. We encourage applicants from businesses and organisations across the built environment to ensure a diverse range of views and perspectives in the Task Groups.

UKGBC is committed to actively targeting more diverse representation in the composition of all existing and prospective steering and task groups. We want to be inclusive to everyone regardless of ethnicity, religious beliefs, gender, marital status, age, disability, sexual orientation or political beliefs. For example, in line with this, we are aspiring to meet the WorldGBC KPI of 50% gender diversity across these Task Groups.

Task Group Commitments

The Task Groups will form a significant part of the Whole Life Carbon Roadmap's core content and will therefore require a reasonable time commitment and consistent involvement.

Whilst the exact work programme for each Task Group has yet to be set, we anticipate Task Group members contributing **5-6 hours** per month between April and June 2021, **2-3 hours** in August and **1 hour** per month in September and October 2021. Task group commitments are as follows:

- Represent your sector / area of expertise, highlighting specific successes, lessons, challenges and opportunities.
- Leverage your technical expertise, networks, experience and knowledge to ensure the Roadmap is as comprehensive and inclusive as possible, with outputs and outcomes of lasting value to the industry.
- Utilise existing industry networks and connections to link to existing or ongoing work that can contribute to the Roadmap.
- Attend virtual bi-weekly meetings (see Table 1). Given the scope of topics explored, it will however be possible (and may be beneficial) for Task Group members to nominate someone from their organisation to attend certain workshops in their place. This will need to be agreed with the UKGBC Roadmap team beforehand.
- Review any papers / reading materials before the meeting (not expected to be more than 30 minutes).
- Assist with research and writing tasks if required.
- Help promote the Roadmap industry consultations and seek industry endorsements in the lead up to COP26.

It is expected that each Task Group will have a Lead who will assist each group in forming conclusions and outputs, alongside a UKGBC Chair. The Lead would have an additional time commitment of **1-2 hours per month** to liaise with the UKGBC team and summarise the Task Group outputs accordingly.

How to Get Involved: Call to Action



Applications to join the Task Groups will be open until **March 5th, 2021**.

To apply to join a Task Group, please email Tom.Spurrier@ukgbc.org and Alexandra.Jonca@ukgbc.org with a short summary (max. 200 words) highlighting relevant knowledge, skills and experience. Please include your Full Name, Job Title & Department, Organisation, Location/Geographic Focus of Work, Sector & Contact Details. A template application form is provided in the annex of this document.

We expect to finalise the Task Groups w/c **March 8th, 2021**, seeking to ensure a balanced breadth of expertise across the groups.

For any enquiries, please contact Alexandra.Jonca@ukgbc.org.

Alternative Ways to Get Involved

Any organisations or individuals who are not able to participate in Task Groups will have the opportunity to review the outputs through online comments (April-June) and/or participate in the wider industry consultation period (June-July). Please sign up for the Advancing Net Zero mailing list to be alerted to these opportunities by emailing ANZ@UKGBC.org.

Annex: Application Template

Please send the following details to Tom.Spurrier@ukgbc.org and Alexandra.Jonca@ukgbc.org by **March 5th, 2021**.

<i>Full Name</i>	
<i>Job Title</i>	
<i>Department</i>	
<i>Organisation</i>	
<i>Location/Geographic Focus of Work</i>	
<i>Primary Sector</i>	
<i>Which Task Group(s) would you be interested in joining?</i>	
<i>Please explain your relevant knowledge, experience and skills (i.e. development, regulation & planning, procurement, design, engineering, operational energy, whole life carbon, heat pumps, etc. (100-200 words)</i>	
<i>Please share any involvement with previous / current relevant industry initiatives or research (i.e. participation in working groups, contributions to reports, etc.)</i>	
<i>Would you consider leading the Task Group(s) you have applied for?</i>	
<i>Are there currently any meetings you know you cannot attend? See Table 1.</i>	