

## **Government-funded research organisation sets out roadmap to support the net zero journey in the built environment.**

The Active Building Centre was setup as part of the Government's Transforming Construction Challenge (TCC) in 2019.

Since then it's worked on over [100 projects](#) with partners aimed at [embedding active energy systems](#) in the built environment supporting the decarbonisation agenda.

The work on real life projects has given ABC great insights into what needs to be done if we are to tackle carbon emissions in our buildings.

There is much to do to transform the construction sector as it still lags behind on research and innovation, often continues a business-as-usual approach, is slow to act and not adventurous enough. The most recent *Committee on Climate Change Report* highlights the building sector as off track to meet net zero by 2050 in the UK: 'There has been no sustained reduction in emissions from buildings in the last decade'.

In October ABC launched its approach to tackling #netzerocarbon by 2050, the [ABC Blueprint](#) sets out a framework for how the built environment can and should change to step up to this challenge.

The ABC Blueprint draws together theory and practical examples from our team's work in creating lab-based demonstrations and embedding active energy systems in a range of building types since 2019. We have good policy, practice and technology – now is a time for much more action to get to a climate positive future.

There is an important role for local authorities and their planning departments in helping deliver active buildings, and therefore low carbon buildings, contributing to the nation's decarbonisation efforts.

Local authorities can do a number of things including:


- Conducting local area energy plans.
- Understanding key grid constraints in their area.
- Considering targets requiring active buildings for all new developments (e.g. for renewable energy generation, use of micro-grids and on-site energy storage). [ABC have had experience of this in South Cambridgeshire District Council.](#)
- Using procurement to drive more sustainable building options (e.g. for provision of new housing or buildings to be delivered required to include low-carbon materials, renewable energy generation, storage and energy integration).

Planners can also:

- Set requirements for active buildings within local planning policy which include reference to comfort for occupants, both embodied and operational carbon performance and overall lifecycle cost reduction.
- Consider post-occupancy monitoring of outcomes for energy efficiency and management as part of planning approvals.
- Ensure planning committees understand their powers in regard to ensuring new development meets the 2050 legislated pathway to net zero.

Action Plan

## Planners/ Planning committees



**Action**

- Education for planning officers on NZC development
- Update planning policy to require all new and extended buildings to be NZC
- Reject planning applications that are for buildings that are not to be NZC

Good example from Gloucestershire – Cheltenham Borough Council planning committee refused 250 home planning application on the grounds that the homes were not going to be NZC, after being recommended to go ahead by the planning officers

As part of the Blueprint, ABC is calling for:

- greater uptake of both on-site and off-site renewable energy generation linking to homes and across communities
- stronger commitments to energy efficiency – especially retrofit
- major investment in skills for the green, renewable, multi-discipline jobs of the future
- more support to build capacity in UK supply chains for renewable energy and energy efficiency in buildings
- better concept design that includes energy, nature and water considerations for new build
- a greater focus on monitoring and measuring outcomes for comfort, carbon and cost – over the lifetime of buildings
- a change in the approach of the construction sector across many disciplines to focus on better outcomes and better performance of buildings.

Dan Cook, the Active Building Centre’s Chief Executive, says, “If we want to achieve net zero, and indeed achieve climate positive outcomes, we need to be bolder.”

We at ABC believe that people are central to achieving this, with [Comfort, Carbon and Cost \(our 3Cs\)](#) as the critical attributes to measure to get this agenda right across the built environment sector going forward.

For a copy of the blueprint go to [www.activebuildingcentre.com/blueprint](http://www.activebuildingcentre.com/blueprint)