



The countryside charity  
Norfolk

## CPRE Norfolk Policy Green Buildings

CPRE Norfolk have always taken an interest in the built environment and have highlighted through a Green Buildings campaign how buildings can be made more environmentally efficient - reducing carbon emissions and saving water not only protects the planet but can also make the building cheaper to run.

We want to see urgent new legislation, coupled with other measures including grants and voluntary initiatives, related to

1. Immediate improvement in standards of new buildings, and building conversions
2. A programme for retro fitting efficiency measures to existing building stock

We also include a note on

3. Buildings that are listed, historic and located in conservation areas

The booklets associated with our Green Buildings events remain valid and can be found via the links at the foot of this policy document, as is a link to lighting design standards.

It is interesting to reflect on how widespread adoption of new systems, materials and techniques in new developments will drive down the costs associated with improving the efficiency of new buildings. This will have a knock-on effect to help improving our existing building stock. This is a key benefit in having a robust approach introduced as soon as possible to help meet climate change objectives.

A key area for consideration is with reference to location of buildings, not just their physical performance. For instance, a high proportion of carbon emissions associated with buildings comes from the movement of traffic associated with those buildings. On this basis, it is essential new builds are located near jobs, facilities and transport hubs. An opportunity also arises from the conversion of commercial buildings (particularly office and retail) to residential in town centres, as existing buildings becomes surplus with the move to home working, and online shopping.

### **1. Immediate improvement in standards of new buildings, and building conversions**

The measures for thermal and utility efficiency for new buildings are primarily contained within the building regulations as set out in the Building Regulations 2010 and Approved Documents. The government has acknowledged these current standards will not enable the UK to meet its climate change ambitions, and has stated following the consultation on New Homes Standards that

- *From 2025, the Future Homes Standard will deliver homes that are zero-carbon ready* (This primarily applies to an end to fossil fuel heating and additional energy efficiency measures. The programme is for a further consultation in 2023, and introduction in 2025)
- *Planning and Energy Act 2008 to remain in force* (This gives clarity that local authorities will retain powers to set local energy efficiency standards for new homes in the immediate term)

- *Interim measures in 2021 to be introduced*  
(It is suggested that new measures will be introduced in 2021 to make new houses 31% more efficient)

### **CPRE Norfolk supports these proposals with the following additions**

- *Measures should be introduced for all buildings, not just residential*
- *The 2021 changes must be introduced more urgently than planned*
- *Local Authorities should enforce all their powers under the 2008 Planning and Energy Act - this includes in all local plans*
- *Regulations should include measures around overheating which will become an increasing issue with climate change*
- *A fully sustainable approach needs introduction for all building materials and construction processes. It is estimated that the construction sector worldwide may account for 40% of annual carbon emissions, with nearly one third of those emissions being related to embodied carbon within the building materials*
- *Measures are coupled to changes within Planning policies to ensure new buildings are located in such a way that they minimise environmental damage, by being located close to transport hubs and facilities minimising as far as possible the generation of personal and fossil fuelled travel needs, and a tougher approach is taken to location in terms of not threatening the long-term availability of water supply*
- *The planning system needs to be made robust in delivering countryside protection and access to green spaces, to ensure access to such spaces and areas for mental and physical well being*
- *External lighting design standards are stringent and always adopted, in order to reduce light pollution*
- *Building quality standards need to be improved, which would happen from giving building inspectors more powers and funding, and making developers give effective warranties to cover defects*
- *A new approach needs to be taken to water, in its conservation in use in buildings as well as in relation to sustainable supply, drainage and flooding*

We believe that such measures must be mandatory

## **2. A programme for retro fitting efficiency measures to existing building stock**

The government have had a stop / start approach to funding efficiency measures for existing building stock, with various methods being introduced and withdrawn from policies around energy generation payments, grants for installation of heat pumps, and loans to enable homeowners to improve the efficiency of the buildings they occupy.

In the UK we have already built around 80% of the properties that will exist in 2050, so the need to decarbonise falls upon making the buildings as efficient as possible in use, but particularly to introduce measures that aid the buildings to be more efficient. An example of this is with heating

systems that account for 10% of total emissions, so there is a need to change systems to remove these emissions as far as possible and enable less use of such systems. This has been the aim of the roll out of Smart Meters, but these do nothing to improve the buildings overall efficiency which remains the major issue.

The UK's building programme needs to reflect on embodied carbon in existing structures. Demolition and rebuilding must be considered against the refurbishment option in every case, and this should form part of the 'approval for demolition' process to ensure we account for the lifecycle of the carbon footprint for the existing building, added to that for the new building.

The cost of retrofitting buildings is high, and there are many examples where contractors have carried out schemes that have resulted in problems both for the homeowner and their neighbours.

### **CPRE Norfolk therefore believes that**

- *A major long term funded approach is required immediately in response to the need to reduce the carbon emissions from the existing building stock, via systems such as heating and energy generation, and energy saving measures such as insulation*
- *All companies involved in retrofitting should be registered and regulated, and carry insurance cover*
- *If a building is to be demolished and replaced, a calculation should consider the existing buildings embedded carbon lifecycle as part of the approval for demolition process to ensure the proposal does not add to carbon emissions, both in terms of the new building and construction process*

### **3. Buildings that are listed, historic and located in conservation areas**

A very sensitive approach is required to ensure the continued protection of the UK historic building stock, including areas recognised as having conservation status. As something that may approach 5% of the total building stock in the UK will be considered to have some historic significance, or be in an area of conservation, it is an area that should not be ignored especially if materials and techniques are available that can aid the efficiency of historic buildings without damaging their appearance and status, and separate guidance is therefore important.

It may be that improving the performance of such buildings may enable a higher level of investment hence enhancing the opportunities for conservation works and reduce the loss of structures which has been an ongoing issue.

- *A full consultation would be necessary as this is a sensitive area with more than one school of thought, and areas for consideration could include*
- *A review of the approach to materials where the original material has a significantly higher embedded carbon footprint than alternatives that do not vary in appearance from the originals*
- *A review of measures that can be taken that are entirely temporary and can be removed without damaging the original buildings appearance or listed features, and do not detract from the building's appearance (or are invisible) in use*
- *A review of measures that can be taken that alter the building construction and appearance, and either cause only minor changes to the appearance or are not visible from recognised key sight lines, including materials that would significantly improve the performance of the building*

- *A review of the grants available to listed buildings to ensure they remain in good condition and encourage improvement in the efficiency of the building where it accords with the above criteria*
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## **LINKS**

### **Green Buildings in Norfolk - Volume 1**

<https://www.cprenorfolk.org.uk/resources/green-buildings-in-norfolk-volume-one/>

### **Green Buildings in Norfolk - Volume 2**

<https://www.cprenorfolk.org.uk/resources/green-buildings-in-norfolk-volume-two/>

### **Reducing Light Pollution**

<https://www.cprenorfolk.org.uk/resources/reducing-light-pollution/>

### **Planning policies on Light Pollution**

<https://www.cprenorfolk.org.uk/resources/planning-policies-on-light-pollution/>