Written evidence from Mike Wye & Associates

The use of insulation in improving the carbon footprint of buildings had focused almost entirely on the carbon saved by reducing fuel consumption without regard for the balance between embodied and sequestered carbon in the material used.

This has put natural insulations at a considerable disadvantage against modern PIR and earthwool type insulations which sequester no carbon but use carbon in manufacture. There needs to be a recognition of the balance between sequestered and embodied carbon as a base measure of sustainability included in the whole life carbon saving calculation. The manufacturers of modern insulations are using this imbalance to promote their products over natural insulations in a way that may well be considered as misleading.

The use of target U Values by building control ignore the effect of insulation on the fabric of traditionally build buildings and encourage the use of inappropriate modern insulations. The effect of this use of inappropriate materials can lead to the deterioration of the building fabric and long term damage to the structural integrity of the building.

The change in permitted development rules applicable to houses pre 1990 may lead to the loss of pre 1990 housing stock for no reason other than 'easy replacement'. The carbon footprint of the replacement building would be much greater than renovation or refurbishment of existing housing stock and may lead to the production if inferior replacement buildings.

Stephen Ruggier

May 2021