UK Health Alliance on Climate Change

Briefing note:

Levelling Up and Regeneration Bill: Designing the built environment for better health, biodiversity, and climate outcomes in the UK

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The UK Health Alliance on Climate Change is an alliance of UK health organisations including royal medical and nursing colleges, British Medical Association, Academy of Medical Science, British Medical Journal, The Lancet, and many other health-focused organisations and faculties. Our collective voice represents more than 1 million health professionals.

We believe that climate change is currently the greatest threat to human health, but there are also significant co-benefits of actions that seek to mitigate and adapt to climate change, protect nature and biodiversity, and promote good health.

The Levelling Up and Regeneration Bill (The Bill) was first introduced in the House of Commons in May 2022. The Bill, endorsed by the Department of Levelling up, Housing and Communities, aims to empower communities and local authorities to work together to deliver beautiful and sustainably developed houses and neighbourhoods. It also aims to achieve better environmental outcomes through plans that incorporate conserving and enhancing nature and climate action (mitigation and adaptation). The proposed changes to the National Planning Policy Framework are currently under review. This is an opportunity to vertically integrate net-zero strategies that can help the government achieve the 2050 target of becoming a zero-carbon nation.

This note sets evidence on the clear links between the built environment, health, biodiversity, and climate outcomes, and how the Levelling Up and Regeneration Bill can support the UK to deliver its net zero strategies and embed climate and nature into planning systems for a healthy future.

The built environment, nature, and climate change

The built environment, defined as the human-made space in which people live, work, and recreate, is responsible for 25% of the total carbon emissions in the UK.[1] Currently, 84% of the nation's population lives in towns and cities.[2] This is projected to increase rapidly over the next few years. Scientific evidence and human experiences suggest that biodiverse nature is essential for human health.[3,4] However, with rapid and large-scale urbanisation, there has been a massive loss in natural spaces and biodiversity. For example, there has been a 13% decline in the average number of different wildlife species in the UK since the 1970s.[3] Climate change is further escalating biodiversity destruction and ecosystem degradation. The development of built environments needs to take into consideration the health impacts of climate inaction.

Built environment and human health

Green spaces and physical activity
There is increasing evidence that the built environment affects both physical and mental health. In 2019, 88.8% of deaths in England were attributable to Non-Communicable Diseases (NDCs).[5] The risk factors of these NCDs are largely preventable and require population-level interventions. Lower

levels of physical activity increase the risk of obesity, diabetes, cardiovascular, and mental diseases. There are more than 850,000 people in the UK with dementia and the economic cost is £23 billion/year (estimated to triple by 2040).[6] In older adults, a simple, effective, and low-cost strategy to reduce the risk of dementia is to increase physical activity.

In 2019, there were 10.3 million mental health disorders associated with 1.4 million DALYs* in the UK. Depression accounted for 33% and anxiety disorders for another 21% of all mental-health-related DALYs.[7] The current burden of mental health problems in the UK is around £118 billion (approximately 5% of the GDP).[7] There is ample evidence of the widening health inequalities due to poor access to such high-quality spaces by low socioeconomic groups.[8] Currently, there are 28,000 to 36,000 deaths in the UK due to air pollution.[9] Areas of deprivation have a significantly higher exposure to toxic air that increases the risk of childhood and adult asthma, cardiovascular diseases, dementia, cancer and hospital admissions.[8]

Urban planning that includes ample natural spaces and inclusive streets creates an environment that promotes physical activity for everyone. Green and blue spaces that are rich in biodiversity also have a positive impact on mental health, reducing depression and anxiety. Green spaces also help to improve air quality.

Housing
The World Economic Forum has estimated that 80% of the buildings present today will exist in 2050.[10] Thus, it is essential that buildings are retrofitted to become energy-efficient and carbon-neutral. More than 2 million families reside in energy-inefficient houses and are at risk of fuel poverty.[11]

The health impacts of poorly insulated houses are significant. There were around 63,000 additional deaths due to extreme cold in England and Wales in the winter of 2020-21.[12] Similarly, climate change is leading to a rise in average global temperatures and in 2022, the UK witnessed some of the highest recorded temperatures in its history.[13] During these heat periods (June to August) 3271 extra deaths were recorded in England and Wales. From 2016 to 2021, deaths during heat periods were higher than non-heat periods and ranged from 3% to 27.7% above the 5-year average.

A built environment with an abundance of green and blue spaces would provide a natural cooling effect during intense periods of heat in the summer. Further, it is estimated that through appropriate insulation and adequate ventilation of houses, there will be 836,000 life-years gained in England and Wales by 2050.[11]

Levelling Up and Regeneration Bill Amendments

Six amendments to the Levelling Up and Regeneration Bill have been tabled that request:
- Everyone has access to a healthy environment, including an objective to maximise the number of people who live within 15 minutes of high-quality natural green or blue space. (Tabled by Baroness Willis of Summertown)
- A duty to reduce health inequalities and improve well-being by ensuring development plans are consistent with achieving health and well-being through the provision of access to green and blue spaces, the 20-minute neighbourhood, and access to cycling, walking and wheeling routes and networks. (Tabled by Lord Young of Cookham)
- A duty to promote healthy homes and neighbourhoods by designing national planning policies to ensure positive improvements in people's physical and mental health and well-being. (Tabled by Lord Crisp)
- To strengthen local powers on new home standards and affordable housing such that all new houses built must meet or exceed the requirements of the Future Homes Standard, including significant reductions in carbon emissions. (Tabled by Baroness Pinnock)

*Disability-associated life years = Total years of healthy life lost due to premature death or living with an injury or illness.

- A duty to consider climate change in relation to national and local planning policies and decisions. (Tabled by Lord Ravensdale)
- To ensure provisions for reporting whole-life carbon emissions of buildings and to set limits on embodied carbon emissions in the construction of buildings. (Tabled by Lord Ravensdale)

To maximise climate, nature, social, economic and health benefits these amendments would:

1. **Ensure equitable access to high-quality green and blue spaces that have enriched biodiversity within a 15-minute walking distance from everyone's home**
   - Conserving or regenerating indigenous flora and fauna while planning land use can help improve air quality, human health, and biodiversity.
   - Increased physical activity and connection with nature improve health.

2. **Create 20-minute neighbourhoods with smart land use**
   - Smart redesigning of urban form such that all essential amenities are within walking or cycling distance with abundant green spaces would help foster an environment for active travel to thrive. This has positive impacts on physical and mental health while helping reduce air pollution and greenhouse gas emissions.
   - These neighbourhoods should be low-traffic with minimal or no space allocated for motorised vehicles whenever possible to further amplify the benefits stated above. Segregation of traffic would reduce the risk of road injuries and deaths.

3. **Retrofitting houses to become energy efficient with adequate insulation and ventilation.**
   - Upgrading homes to provide better insulation would provide significant short-term and long-term relief to the cost-of-living crisis, reduce carbon emissions, and improve health.
   - Houses adapted to the prolonged periods of intense heat during summer by having appropriate ventilation systems in place.

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