

To: Oxfordshire Growth Board
Title of Report: The promotion of Low/Zero Carbon Housing in Oxfordshire
Date: 24 November 2020
Report of Interim Head of Programme
Status: Open

Executive Summary and Purpose:

The purpose of this report is to update the Growth Board (the Board) on current work being progressed in response to recommendations endorsed by the Board in March 2020 promoting of Low/Zero Carbon Housing. The report also offers the Board for information a summary of wider partnership work being undertaken in this area.

Recommendation:

That the Growth Board:

- 1) Note the report and progress made against recommendations of the March 2020 Zero Carbon Housing Report.
- 2) Approve the submission of a draft letter to the Secretary of State for Housing, Communities and Local Government at Appendix 1.

Appendices

Appendix 1: Letter to the Secretary of State for Housing, Communities and Local Government

Appendix 2: Summary of Low/Zero Carbon Activity by District

Introduction and Background

1. In March 2020, the Board received a report that recommended a series of actions to support the scaling up of low carbon housing delivery in Oxfordshire. These opportunities include housing delivery through new settlements and Garden Towns, promoting sustainable living under the Living Oxfordshire Programme of the Local Industrial Strategy (LIS), the Oxfordshire Housing and Growth Deal and the potential for investment and policy flexibility in delivering low carbon housing across the Oxford to Cambridge Arc.
2. Whilst there is a much wider context and series of influencers in the journey to net-zero, including limitations presented by HM Government policy, this paper is principally concerned with updating the Board on progress against those recommendations agreed in March, related to the challenges and opportunities for

scaling up development of net-zero carbon homes. All Oxfordshire Local Authorities recently agreed revised Terms of Reference for the Board, which feature support for the development of local planning policy that addresses the ambition for low carbon housing, whilst contributing towards biodiversity gain and embracing the changes needed for a low carbon world. In addition, each authority has declared a Climate Emergency and are working together, through a joint Climate Change Steering Group comprising energy officers, to consider where shared working can bring benefits in this area.

3. There are also plans for significant housing development across Oxfordshire and a strong case for ensuring that this housing is built to high energy efficiency standards and achieves net-zero carbon as quickly as possible. But, although addressing the carbon efficiency of new developments is vital, approximately 80 per cent of the housing that will exist in Oxfordshire in 2031 (according to Local Plans) has already been built, so addressing carbon emissions from existing stock is the bigger challenge. The Oxfordshire Energy Strategy identifies that about 4,000 current homes per annum would need to be retrofitted to help us meet our 2050 ambitions and highlights the need to build a clear roadmap to achieve this. This will require significant intervention and investment from HM Government to enable large scale local retrofit programmes.

Low Carbon Housing and National Policy

4. HM Government recently consulted on their White Paper *Planning for the Future*. It aims to overhaul the planning system and reform the way homes are built. In reference to HM Government's carbon ambitions the paper states:

From 2025, we expect new homes to produce 75-80 per cent lower CO2 emissions compared to current levels. These homes will be 'zero carbon ready', with the ability to become fully zero carbon homes over time as the electricity grid decarbonises, without the need for further costly retrofitting work.

5. While this is encouraging, the concept of 'zero carbon ready' homes and the White Paper's wider ambitions are open to interpretation if they are not supported by a clear set of Building Standards. Equally, the Board will note the view of the Centre for Sustainable Energy that the importance of decarbonisation of the existing power grid needs to be supported by transformations in infrastructure and dramatic reductions in certain forms of energy use, including in terms of transport and spatial heating which are "key areas of influence for planning".¹
6. Accordingly, the lack of detail within the White Paper leaves many questions unanswered such as how binding housing targets will be weighed against environmental obligations such as pollution levels, biodiversity and carbon reduction commitments. Similarly, there is no reference to how the proposed national or local design codes will address low and zero carbon infrastructure, including any variations within the different zones.²

¹ Our thoughts about the government's proposed planning reforms; Centre for Sustainable Energy: <https://www.cse.org.uk/news/view/2503>

² Government planning reform proposals in England

7. The Planning System provides the framework and tools for delivering on local ambitions. Any changes to HM Government's planning policies and design codes at the national level will have a significant influence on the ability of local councils to deliver on their commitments to create thriving, happy and healthy communities. Whilst the White Paper remains in consultation, it creates significant uncertainties that may impact on our ability to deliver against local carbon targets.
8. A response to the Future Homes Standard consultation (which ran until 7 February 2020) has yet to be published, but this will be instrumental in understanding the intended route to delivery for zero carbon homes and how it interacts with the planning system. A response to the Future Homes Standard consultation is due in the Autumn. The Board will be aware that this consultation proposed removing council's ability to set higher standards locally. Whilst there are strong arguments for high national standards which ensure consistency and certainty for the industry, many authorities are concerned that if national standards are not ambitious enough, removing the ability to set local standards will inhibit local efforts to achieve carbon reduction commitments.
9. Government has not however just reflected the low carbon debate in policy discussions, On 28 August 2020, HM Government launched their Green Homes Grant initiative which allows eligible homeowners or landlords to apply for a voucher towards the cost of installing energy efficiency improvements, which could include insulating homes or installing low-carbon heating. Vouchers cover two-thirds of the cost, up to a maximum government contribution of £5,000, whilst people in receipt of certain benefits may be eligible for a voucher of up to £10,000.
10. Finally, Government has recently announced a £50m Social Housing Decarbonisation Fund for Local Authorities (or Consortia led by Local Authorities). The award of funding to Local Authorities will be through a competition building on the experience of the Whole House Retrofit Programme. Applications can be made up until 12 November 2020 with schemes to be complete by 31 December 2021.

Progress Against March 2020 Recommendations

11. The following section sets out progress that has been made against the recommendations agreed by the Board on 11 March 2020.
12. ***Recommendation 1 and 2: Make the case to Government for clear, ambitious national building standards with a long-term trajectory for minimum standards accompanied by investment for Local Authorities and developers to move quickly to higher standards. Further, make the case to Government for sustained incentives, investment guidance and support for local retrofit programmes for existing homes.***
13. As part of this report, the Board is asked to approve a draft letter- at Appendix 1- to the Secretary of State for Housing, Communities and Local Government,

making the case for the actions set out in recommendations 1 and 2 above. The letter provides some wider context to the need for an ambitious approach to strengthening building regulations whilst recognising that it will take a little time for industry to adapt. The letter has been developed in consultation with the Growth Board's Housing Advisory Sub-group and its Chair.

14. **Recommendation 3:** *Champion the exchange of good practice and guidance on sustainable and zero carbon construction to promote uptake and set local expectations.*
15. A Webinar is under development with input from both members and relevant officers across partners. The event aims to raise the profile of Oxfordshire's low-carbon agenda both widely and, however, an event held before the end of the year, dependent upon the timing of the one-year Spending Review, will also provide an opportunity to highlight the Growth Deal programme extensions, new grant flexibilities and a desire to prioritise low/zero carbon scheme within the Affordable Housing programme (OAHF).
16. The event will aim to encourage and inspire Registered Providers (RPs) and developers to take advantage of these developments and submit applications within the extended OAHF. Officers within the Growth Deal team are engaging with Homes England for their input into the event which, along with developers and RPs, will be aimed at locality officers, councillors and other interested parties including local landowners and community groups. Suggestions for the agenda include presentations on national exemplar projects (such as the Norwich City Council Passivhaus development) and organisations as well as local case studies in policy and delivery.
17. Lessons are also being learnt through the delivery of existing planned developments (e.g. Salt Cross Garden Village), with a 'Living Lab' approach, exploring innovative home design and use of energy, to achieve net-zero carbon in the development. With increasing frequency, there is evidence that innovation in this area continues to grow both locally and nationally.
18. **Recommendation 4:** *Include higher design standards as an objective of the Oxfordshire Plan 2050 at the earliest opportunity to achieve weight in the planning system and consider what can be done in advance to set higher expectations of standards.*
19. Our ability and ambition to set local expectations with regards to sustainable and zero carbon construction will be framed in the first instance though through key strategic documents that guide and help to inform local development, alongside national and local policy. For example, the development of a non-statutory Strategic Vision for Oxfordshire will establish a shared set of place based principles that form an overarching ambition for Oxfordshire's future – bringing visibility to what it is that the Local Authorities of Oxfordshire want to achieve together with wider partners, on behalf of residents.
20. The Board considered the Vision on 30 October as a draft document for consultation. It sets an ambition that Oxfordshire will be at the forefront of UK de-carbonisation efforts by maximising all opportunities to significantly reduce

Oxfordshire's carbon footprint and build resilience. This includes an ambition that all new developments to be of the highest quality and design standards, with support given to developers embracing innovative building solutions and sustainable construction methods. This Vision builds on the recent change in the Growth Board's purpose- enshrined in its terms of reference- which makes tackling climate change through sustainable development a key ambition. The Board will be aware that the Vision is timetabled to return to the March meeting for endorsement.

21. Local Authorities can set targets for the highest quality building standards – whether that is through the Oxfordshire Plan 2050, or through Local Plans and supplementary guidance, however the scale of ambition will be subject to national regulations currently under review. The Board are highlighting the need for ambitious standards as discussed in paragraphs 12 and 13 and officers are exploring potential policy options, including for example enshrining in local plan policy targets for renewable and low carbon energy generation for strategic developments.

Recommendation 5: Explore opportunities to scale up low carbon technologies through Modern Methods of Construction (MMC) and work with Homes England and developers to develop a pipeline of sites for MMC.

22. Oxfordshire partners are exploring opportunities to scale up low carbon technologies through Modern Methods of Construction which have the potential to bring down the costs and scale up delivery of highly energy efficient homes. Initial discussions and a field visit pre-Covid-19 was held with the Building Research Establishment, the national centre of excellence for R&D and knowledge exchange in the built environment to understand what innovation in modular development is being introduced into the market and how it may be applied in Oxfordshire.
23. Homes England have been approached in relation to the Home of 2030 professional design competition. This competition engaged with designers and manufacturers to invite ideas for new low carbon, age-friendly homes, meeting the highest standards of design. Winners will be announced towards the end of November and will be introduced to Homes England development framework partners to explore developing bids for Homes England land. There is interest in the shortlisted entrants, and it is hoped that one of the winners may be able to be part of the proposed Oxfordshire webinar promoting low carbon and MMC.
24. ***Recommendation 6: Support public campaigns to raise awareness of what households can do to reduce energy consumption in their own homes, the benefits of energy efficient homes and lifestyle adaptations.***
25. Officers are working with the relevant communication leads across each Local Authority to coordinate a concerted effort to increase public awareness of ongoing work in this area. Specifically, this work will be carried out via social media to signpost residents to local and HM Government schemes that support improving building standards through retrofitting (e.g. the [Green Homes Grant](#)). Local Authorities' will also look to highlight demonstrator examples and best practice

within their own areas relating to existing low/zero carbon development, some of which are being supported through the Oxfordshire Housing and Growth Deal.

26. Given that zero and low carbon homes often command a market premium (though there are increasingly exceptions), this work will also look to promote the value and benefits of owning a new low/zero carbon home, which often offsets extra costs in the long term, whilst delivering better environmental outcomes. Where possible, we will seek to link this work with the public engagement exercise for the draft Strategic Vision.

Oxfordshire Growth Deal and Low Carbon Developments

27. Within the first two years of the OAHP there have been several sites which are delivering low carbon units; including three Passivhaus wheelchair accessible bungalows in Cherwell, an additional 15 units with high energy efficiency and eight zero carbon units as part of an exemplar development in Oxford. Several other Oxford City developments incorporated various elements of low carbon technology including a scheme of 43 units with photo voltaic panels and electric charging points.
28. Recent changes to the parameters of the OAHP mean that funding can now exceed the agreed baseline if it can demonstrate value for money and a clear rationale for higher funding. Low and zero carbon developments could meet such requirements and these flexibilities are encouraging both developers and RPs to bring forward innovative low carbon schemes in the final years of the programme.
29. Partners have identified 43 units within the current year three programme that will have some element of energy efficiency or low carbon technology included in the developments. Within year four this figure rises to 379 units or 50 per cent of the programme.

Update from Individual Authorities

30. Individual Local Authorities continue to progress work in reference to their own priorities and plans. A summary of the key areas of focus and their progress so far is listed at Appendix 2.

Financial Implications

31. There are no financial implications arising directly from this report.

Legal Implications

32. There are no legal implications arising directly from this report.

Conclusion

33. This report provides a summary of the work being undertaken to address the zero carbon recommendations agreed by the Growth Board in March 2020, as well as wider work in this area. The report asks the Growth Board to note the progress

being made towards its recommendations, both collectively and by individual partner authorities, and to approve the draft letter set out at Appendix 1.

Background Papers

34. None.

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Appendix 1- DRAFT Letter to Robert Jenrick - Secretary of State for Housing, Communities and Local Government

Dear Secretary of State

Zero Carbon Building Standards

We are writing regarding the vital need to ensure that the zero-carbon ambitions of the Planning White Paper translate into tangible and robust national building standards, backed by long term HM Government led incentives and initiatives to secure change at pace within the sector.

The Oxfordshire Growth Board (the Board) recently undertook a significant review of its work programme in consultation with residents and stakeholders. The outcome of this review is that we have substantially revised our objectives to support, through enabling and collaboration, the development of local planning policy that meets the UK Government's aim of net-zero carbon by 2050 and reflects the climate emergency declarations made both locally and globally.

Accordingly, the Board welcomes the broad thrust of the recent Planning White Paper and its ambition of planning for sustainable places (pillar two).

The Board believes however that it is critical that government recognise the strong regulatory role it can play in supporting these ambitions through bold improvements to building standards to drive the journey to zero carbon by 2050. The Board's view is that this is crucial as the scale of the challenge to deliver zero carbon by 2050 will be insurmountable without significant changes in the building regulations that govern local development.

In doing so, we should learn from the experience of the past ambition to require all new homes to be carbon neutral by 2016 which proved undeliverable because the market was not able to adapt at the pace required. That is why we must set out a clear, ambitious route map to zero carbon. Setting out such a defined route map that describes the step changes required would provide the market stability that enables long term investment decisions to be made and enables the housing market to adjust to zero carbon delivery.

In this context we are concerned that the recent Future Homes Standard Consultation suggested removing local authorities' ability to set higher standards locally. The Board is concerned that, if national building efficiency standards are not sufficiently ambitious to allow local authorities to drive the improvements in development required, the removal of the ability to set ambitious local standards for carbon reduction via locally agreed planning policies will curtail councils' ability to achieve zero carbon by 2050.

The Board also recognise however that building standards and /or planning policy alone will not make zero carbon 2050 a reality and that we will need to provide incentives that match the scale of our ambitions; incentives which help to overcome longstanding challenges faced by the development sector in addressing carbon reduction. Through the Oxfordshire Energy Strategy and the Oxfordshire Industrial Strategy, we are working in partnership to harness, leverage and scale-up low carbon initiatives to grow our low carbon economy – not just locally – but nationally and internationally too. In addition, working with our partners at Homes England, we are also using every opportunity to support decarbonisation through our Oxfordshire Housing and Growth Deal. Through this work we have identified the following challenges:

- There is not enough support for existing supply chains to ramp up the scale of their operations to reorient to low carbon.
- There is both a skills gap and labour shortage for improving domestic energy efficiency.
- There is a lack of incentives for developers and buyers to switch to low carbon homes.
- The existing housing stock requires extensive retrofitting at great cost.
- Developers and property owners do not benefit from domestic energy savings which accrue to the occupier, so the market does not currently support a price premium on low carbon housing. Consequently, despite some excellent local examples, many zero-carbon developments command a premium that is not match by demand.
- Improving building standards can be a challenge to affordability and viability ambitions on developments, especially in high cost areas such as Oxfordshire.

We recognise that HM Government has existing support programmes and incentives in place to tackle these issues, but these must be scaled up, sustained and supported over the longer term to boost capacity and confidence in the sector, and to level up the existing housing stock. Government's support in driving up building standards will not only help to meet our shared carbon ambitions, but also help to grow market demand, drive down costs, and accelerate enterprise and innovation.

Despite the challenges, all the Oxfordshire authorities are exploring ways and levers available to promote and support the improved carbon efficiency of new homes, learning from experience to date and opportunities provided by planned housing development to scale up delivery of net-zero carbon homes. For example, within the Arc the Board is playing a role in promoting the adoption of high-quality building standards. Similarly, within Oxfordshire and supported by Government funding, we have, through the Low Carbon Hub and the Cosy Homes Oxfordshire Project developed a supply chain of trusted providers, which are offered as a 'one-stop shop' for home retrofit services. Finally, Oxford City Council's development company is working to a stretching target of 70% carbon reduction from 2013 Building Regulations; balancing low carbon aspirations with meeting affordable housing and available financing. There are also several successful low carbon demonstrator and pilot projects in Oxfordshire that have supplied evidence of how to overcome the challenges to mainstreaming this approach to development. Finally, we are addressing our zero carbon ambitions through the Oxfordshire Plan 2050 that will set the landscape for the development of our county as it undertakes the journey to zero carbon.

The Board can offer further insights as to how the system could improve and adapt on the journey to zero carbon 2050 and we want to work together with others to find solutions. We believe that now is the opportune moment, through the Planning White Paper, NPPF and the new 'Sustainable Development Test,' to set the framework that enables local government to drive forward an ambitious and systematic approach to decarbonising our homes.

In conclusion, The Board writes in support of the ambition in the Planning White Paper to "facilitate ambitious improvements in the energy efficiency standards for buildings to help deliver our world-leading commitment to net-zero by 2050." We hope you agree that this is the time for longer term planning and investment that will bring certainty to councils and the development sector to ensure we meet our shared vision for a zero-carbon future.

Appendix 2 - Summary of Low/Zero Carbon Activity by District

Cherwell District Council

Policy initiatives:

- CDC Local Plan Policy ESD1: 'Mitigating and adapting to climate change' includes designing developments to reduce carbon emissions and promoting the use of low carbon energy.
- CDC Local Plan Policy ESD3: 'Sustainable Construction': All new residential development will be expected to incorporate sustainable design and construction technology to achieve zero carbon development through a combination of fabric energy efficiency, carbon compliance and allowable solutions in line with Government policy.
- Policy Bicester 1: NW Bicester Ecotown, zero carbon mixed-use development including 6,000 homes.
- Council's adopted Housing Strategy 2019-24 and Action Plan.

Delivery of schemes:

- 3 units at Bullmarsh Close, Middleton Stoney, designed and constructed to Passivhaus standards - Growth Deal-supported.
- Hook Norton Community-led housing scheme - 12 homes to be built to Passivhaus or low carbon standards.
- Bicester Library site (3 units) – built to low-carbon standard, in Growth Deal programme.
- Growth Deal infrastructure funding supporting road access and realignment at Howes Lane (NW Bicester site) where 393 homes, a school and business centre are being built to zero carbon status.
- Graven Hill design code is significantly higher than minimum standards and a Passivhaus builder is building out current apartments.

Oxford City Council

- 'Pursue a zero carbon Oxford' is one of the Council's four corporate priorities.
- The Local Plan 2036 requires residential new build to demonstrate a 40 per cent carbon reduction (on existing Building Regulations, currently 2013).
- OCHL aims to transform the quality of new homes and new schemes entering the development pipeline will seek to achieve at least a 70 per cent carbon reduction.
- This will take a fabric-first approach and move to all electric schemes and the use of PV solar panels. It will seek to ensure that the cost in-use to residents is affordable ('resident protection'), landlord costs for maintenance and replacement are competitive and that residents enjoy high satisfaction levels.
- One Growth Deal Year Two scheme is being built to zero carbon (regulated energy) standards using off-site construction.
- 1-2 sites maximising onsite PV to trial 'virtual microgrid' as part of Project LEO with Low Carbon Hub.

- Procurement of off-site Manufacture will scope 70 per cent carbon reduction, Passivhaus and zero carbon.
- The Council is working in partnership with community-led housing groups to bring forward new exemplar schemes to Passivhaus, or equivalent, standards.

South Oxfordshire District Council

- The Council's draft Corporate plan includes the theme "Dealing with the climate emergency".
- Minimising carbon emissions is a strategic objective of the South Oxfordshire draft Local Plan 2011-2034.
- Draft Local Plan policy DES9 requires "All new development ... should seek to minimise carbon and energy impacts in line with nationally adopted standards".
- The council is currently considering creating a housing delivery vehicle which would prioritise the delivery of low and zero carbon homes.
- Officers are considering the redevelopment of a council-owned site which may be used to provide a number of low, or zero carbon affordable homes.
- Officers work with organisations involved in low and zero carbon housing, including partnership working with Registered Providers to deliver these homes as part of their delivery programme.

Vale of White Horse District Council

- The Council's draft Corporate Plan includes "Tackling the climate emergency".
- Vale of White Horse Local Plan 2031 is underpinned by a "presumption in sustainable development". Core Policy 40: Sustainable design and construction, sets out design measures aimed at responding to the impacts of climate change. The principle of zero carbon is embedded in the council's Dalton Barracks strategic allocation.
- The council is currently considering the creation of a housing delivery vehicle which, if created, will prioritise the delivery of low and zero carbon homes.
- Officers work with a number of bodies and organisations involved in low and zero carbon housing, including partnership working with Registered Providers to deliver these types of homes as part of their overall delivery programme.

West Oxfordshire District Council

- The Council Plan, 2020, identifies climate action as a corporate priority.
- LGA HAP funding to develop a guide/toolkit and planning policies to enable the design and delivery of highly energy efficient/carbon neutral dwellings.
- Revised Affordable Housing SPD (in consultation) will update housing approach to include net-zero carbon, MMC and reducing utility bills.
- AAP for Salt Cross Garden Village (large strategic development c. 1100 affordable homes), currently in consultation, outlines a requirement for net-zero carbon development.
- Small self-build and CLT-based schemes are included in the Year 4 programme.
- Limited WODC land for housing. However, work is in progress to bring forward an affordable-based scheme in a rural area using MMC on WODC land.
- WODC is seeking to buy land/fund its own affordable housing developments focusing on MMC.
- Working with RP's to bring forward small all-affordable LC schemes.

Partnership work

A county-wide consortium bid for £1.2m of Government funding that aims to help 170 households across the county make energy efficiency improvements to their homes. This bid was prepared on behalf of the councils by the National Energy Foundation, who already deliver the Oxfordshire Better Housing Better Health service. The government will assign £200m via this Local Authority Delivery competition looking for measures to support low income households in the least energy efficient homes (EPC rated E, F or G).