Planning for Net Zero

Summary of a roundtable discussion held in July 2021.

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Executive Summary

- Two of the Government's top priorities for reforming the planning system are: to deliver more and more-beautiful homes, and reducing carbon emissions so that Britain is emitting no more carbon than it is absorbing ('Net Zero').
- Though each of the priorities affects the other substantially, they are often considered in isolation. Due to a lack of published and timely work analysing this interaction, Policy Exchange convened a variety of experts for a roundtable discussion on interactions between climate, environment and planning.
- All panelists agreed that though the planning system attempts to 'Plan for Net Zero' now, it is held back by various constraints, including lack of funding, lack of expertise, lack of a toolkit to balance various factors, or a range of other factors.
- Panelists discussed a range of policy reforms that could go some way towards addressing these shortcomings. These ranged from mechanisms to deliver trees and biodiversity, to tweaks to planning frameworks that would account for the benefits of electricity generation.

Introduction

The Government has given planning reform a prominent place in its legislative programme and correspondingly in this year's Queen's Speech. Its prominence is similar to another one of the Government's key priorities: achieving 'Net Zero'.

It is widely accepted that the planning system must reflect the Government's priorities on climate, environment, and emissions. Construction affects emissions directly through materials, techniques, and insulation standards. Urbanisation patterns affect emissions by encouraging and discouraging different modes of transport. Rules affecting the development of different sources of electricity, including nuclear and renewables, affect their take-up.

These overlapping areas offer opportunities to facilitate progress towards Net Zero, for example through direct emissions reductions, nudging consumer behaviours, or altering the economics of decarbonisation. Linking these opportunities with other policy areas could allow the planning system to support wider public policy programmes such as the *25 Year Environment Plan*.

Policy Exchange hosted a roundtable to investigate how the planning system could help accelerate the UK's transition to Net Zero. The event was held under Chatham House rule, and attendees included representatives from regulators, government advisory bodies, low-carbon infrastructure developers, academics, industry associations and planning and environmental law experts. The discussion centred on four key areas:

1. Relationship between planning and decarbonisation
2. Decarbonisation within the Government's planning reforms
3. Potential areas of reform
4. Potential risks

The aim of the roundtable was to explore these issues from a policy perspective, given the lack of published work on the link between the UK's planning system and decarbonisation.

This note summarises the key points made at the roundtable. It is written in the words of the authors and does not necessarily reflect the views of Policy Exchange.

Key points from discussion

1. Relationship between planning and decarbonisation

- Attendees disagreed to what extent it would be possible or desirable for local planning authorities to handle issues of decarbonisation themselves: some believed that they would lack 'the bandwidth, the skills, and the resources'. By contrast others said they were surprised, in their own personal experience, by the 'extent to which and expertise with which some of the smallest and most under resourced LPAs' engaged with these questions.

- Some attendees thought that environmental issues were better tackled at the national level, for example through changes to Building Regulations: 'there is a difficulty to the supply side without consistency of approach'. They related this to the delays suffered by projects because of the bespoke, localised, negotiating nature of Section 106 agreements.[1] Others stressed that a top-down approach may disenfranchise local stakeholders who were important to have on-side for projects to go ahead effectively. For example, municipal land ownership in Germany meant that green energy projects would raise revenue that could be used to benefit locals, and therefore attract their support.

- Several attendees raised the importance of infrastructure, and how planners could help enable overall Net Zero goals by helping facilitate the expansion of the national grid ('offshore wind has to go 70 miles onshore to find a connection point'), and infrastructure for Electric Vehicles ('local planners could give consents to developers, e.g., allocating 20% of retail car parking spaces to EV chargepoints').

- There was broad agreement that taking a holistic approach is necessary to deliver maximum benefits: 'energy efficiency, renewable generation, green space, wetlands, trees, and places that are nice to live actually.' One suggestion was that national metrics and processes to quantify these different inputs might allow for more balancing. 'Net Zero needs to be embedded in everything we do, as it's such a big goal.'

[1] Section 106 Agreements are legal agreements between Local Planning Authorities and developers over the actions developers must take as part of their planning consent.

- One panelist stressed that in many Government priorities there was a big shift toward greater responsibility and respect for local Government: 'we've seen things like Levelling Up, the Towns Fund, we've seen 10, 20-year plans.' Combined with the strong commitments local authorities were making around Net Zero, this panelist believed there might be a possibility for rapid change at a local level under the existing system.

2. The place of decarbonisation within the Government's current planning reforms

- There was disagreement among panelists over whether, overall, the Planning Bill was taking things in the right direction. Some panelists argued that reforms would lead to a quicker and more unified national system which would allow delivery of important infrastructure and housing more quickly. Others argued that though the reforms may deliver more development, without a broad holistic approach the new housing would not create housing that was environmentally friendly, well connected, desirable to live in, and attractive.

- Panelists discussed whether enough was being done to plan low carbon homes, e.g., sustainable homes on brownfield which were car independent (i.e. residents would not have to own cars to live there), and whether liberalising reforms could put these at risk. Panelists noted that some of this would be down to market decisions by homebuyers, and not all could be set from the centre: 'top of the range insulation costs £10,000 more than the standard type—will the market value this more, or value saving the £10,000.'

- All panelists agreed that it was impossible to be certain without full detail of the Bill. Many saw potential in ideas that were currently emerging, like design coding, but thought the devil was in the details: 'the national model design code, which is being piloted, has taken a very generic approach, rather than delving into the specific site, specific coding, and master planning that has been proven to be better.'

- One panelist worried that simplistic parts of the planning system could backfire in environmental terms: 'if we just require biodiversity net gains to happen as close as possible to the sites of development, which is actually floating around DEFRA at the moment, that could be very poor for just about everyone'. This is because strictly promoting onsite or near-to-site biodiversity offsets could encourage investment in habitats with low environmental value, rather than prioritising investment in habitats which offer the highest environmental benefits.

- One panelist believed there was a significant conflict between the Government's approach in its Environmental Bill and in its Planning Bill (or what was expected of the Planning Bill). Concern specifically centred on the planning system's ability to promote 'development *and* nature recovery'. Two forthcoming policies could make this a reality if they are used properly. The first is Local Nature Recovery Strategies, which were seen as playing an important role in informing development about what kind of actions are beneficial to the local environment. The second is biodiversity net gain, which shows promise for making 'planning for development *and* nature recovery' a reality by acting as a 'sweetener' for local groups holding environmental concerns. Net gain could also reduce costs incurred by development related to legal challenges. This last point particularly applies to large infrastructure projects. One attendee pointed out that any biodiversity net gain system needs to promote the right kind of habitat investments in the right places, ideally coordinated at the landscape scale. Another attendee suggested that tight coordination between the Government's planning reforms, Local Nature Recovery Strategies and DEFRA's agricultural reforms is essential to realising 'planning for development *and* nature recovery'.

- All panelists agreed with the goal to plant more trees, but a range of comments centred on difficulties with achieving this goal. One panelist said pointed out that even small numbers of trees could lose farmers all of their agricultural subsidies for a given field. One noted that 750,000ha would be needed for trees by 2050, but that this had not been yet identified.

3. Potential areas of reform

- One topic of discussion was how we could make sure that new neighbourhoods built on greenfield were not entirely car dependent: 'Victorian suburbs are often hard to get to. This is fine if they can reach everything else quite easily, but a Victorian looking lifestyle in a remote location is a much bigger challenge.' The panel discussed different options of getting around this: 'What Freiburg did, famously was made everyone parked their cars on the edge, which is quite interesting.' But this was believed to not fully solve the problem, as cars were still used for journeys outside of Freiburg. Most agreed that solving this required creating property communities with a wide range of typologies and amenities.

- Another topic of discussion was mobility and infrastructure. One consideration was electric on-demand personal transport: 'the future could consist of us calling up almost the equivalent of our iPad on wheels, which will be delivered by Amazon. And there'll be tens of thousands of them, and we'll just get in, it will carry on our life.' There was a worry that this might discourage healthier active transport-based lifestyles.

- One panelist raised the question of embodied carbon, noting that if over half of the emissions associated with a property happen before it is even inhabited, then it is not enough to only think of the emissions happening after it becomes occupied. Another was to incorporate local and traditional materials more into building: timber and stone cause dramatically less in emissions than cement and steel.

- Retrofitting was also a key area for several panelists. 'It's easy to set standards for new build housing but what do you do about housing that's already there.' In policy terms, panelists believed these necessitated improvements to the knowledge households had, the skills in construction, and the finance available to fund it.

4. Potential risks

- Attendees mostly agreed that the planning system is not a risk to decarbonisation in itself, but it could be if local circumstances are not appropriately factored into its design. If used inappropriately, planning could promote the wrong solutions in the wrong places at the wrong times. Transport was used as an example; Nottingham and the London Borough of Hackney have entirely different 'starting points', in terms of the level of emissions and forms of transport contributing to climate change, as well as different local opportunities.

- Several attendees discussed the idea of updating the legal remit of statutory consultees so that they can consider the 'positive' effects of low-carbon infrastructure like solar and wind on climate change when providing advice. However, the discussion added two caveats to the idea. First, a Duty such as this is only useful where it does not tie the hands of environmental regulators to uphold environmental protections as they do now. Second, any Duty should be underpinned by clear metrics, so that both the positive and negative climate impacts of infrastructure can be transparently judged.

- Discussion highlighted a series of 'quick wins' for decarbonisation that planning can tackle this year. Specifically, the planning system is allowing new buildings to be constructed which are already outdated under the UK's climate change plans. For instance, energy efficiency standards are too low, meaning some buildings will require retrofitting in five to ten years as the UK's building stock is decarbonised. Discussion highlighted several benefits to acting now on these issues: It will avoid 'locking in' high-carbon infrastructure when emissions should be falling; it will reduce the overall costs of decarbonising buildings, such as by avoiding costly retrofits at a later date and putting downward pressure on the price of heat pumps; and it will free up more of UK's carbon budget for sectors which are harder to decarbonise, such as agriculture.

5. 'If you could reform one thing about the planning system, what would it be?'

At the end of the roundtable, we asked each participant the above question, which led to a rich variety of responses:

- Building regulations which deliver 'not out-of-date' buildings
- Change the National Planning Policy Framework to put 'much greater emphasis' on Net Zero and biodiversity
- Over time, morph the Local Nature Recovery Strategies into 'Local Environmental Improvement Plans'
- Ensure the climate benefits of projects are part of the criteria used to judge projects. The UK has major ambitions for deploying low-carbon infrastructure, but there are real challenges to deploying it which will grow as the rate of deployment increases.
- Ensure any Net Zero Duty is underpinned by clear metrics to judge projects by, which highlight infrastructure's positive and negative impacts on decarbonisation
- Continue developing a place-based approach to planning through Local Plans but connect them with national sustainability policies through metrics on Net Zero and adaptation.
- Develop clear standards that help us measure the effects of planning over time, such as metrics on 'good quality housing' from a decarbonisation perspective.
- The UK is a spatially stressed country. Creating clear prioritisation of activities through policies, particularly in the marine space, will help accelerate and deploy the low-carbon infrastructure needed to meet Net Zero.

Policy Exchange concluding comment

The planning system has a clear role in promoting decarbonisation today. There may be 'low hanging fruit' reforms which, if not acted upon in the short term, are likely to increase the costs and scale of future decarbonisation.

The planning system serves multiple functions, from environmental protection to creating beautiful places, and a clear message from our discussion was that all its functions must be joined up. The Government's reforms to planning, climate and environmental frameworks should focus on being integrated and complementary. This may mean considering the benefits that power generation or infrastructure capacity can have to national environmental goals as well as their local planning effects. The goal would be to maximise the planning system's contribution to nature recovery and Net Zero, by protecting valuable habitats and reducing the 17% of emissions that are generated by buildings, while ensuring it also delivers its 'business as usual' functions at a time of reform.[2]

There are ways where these two priorities dovetail naturally. For example, the Government has a clear priority to promote development that aligns with local ideals of beauty. This means using local wood, stone, and bricks, which have neither used much carbon in transport, since they are nearby, and unlike steel and cement, do not take large amounts of carbon or other pollutants to produce. In this way, local vernaculars can be sustained and supported while Net Zero is promoted.

Where houses are built and expanded, and what typologies they follow is important too. Where low density detached houses on isolated estates promote driving and high energy use, terraces and mansion blocks built near infrastructure and amenities can encourage active travel and other low carbon lifestyle

[2] Committee on Climate Change (2021). *The Sixth Carbon Budget: Buildings* (Link).

choices. Policy Exchange papers like *Strong Suburbs* show how such 'suburban intensification' may be possible with community consent.

Importantly, planning also needs to be responsive to the demands of decarbonisation as they change. Ensuring the environmental and climate impacts of development are considered in planning decisions offers an organic way to 'build in' this responsiveness. Stricter spatial prioritisation may be necessary to ensure the low-carbon infrastructure needed for Net Zero is built at the right times and in the right places; Policy Exchange's 2020 report, *The Future of the North Sea*, sets out these challenges for marine space. Indeed, infrastructure development needs to be particularly responsive to the demands of Net Zero, given its potentially significant impacts on emissions compared to other forms of development.

One area of uncertainty in our discussion was the role of planning in encouraging the development of nature-based solutions to climate change. This is an important area for future research given the Government's ambitious tree planting targets. Further work is also needed to investigate how aspects of the planning system not discussed here can contribute to Net Zero, such as the work of the Building Better, Building Beautiful commission. Opportune areas are those where the 'regular' aims of planning, such as creating beautiful places, can be delivered alongside creating progress towards Net Zero.

Further reading

Dr. Samuel Hughes and Ben Southwood (2021). *Strong Suburbs: Enabling streets to control their own development*. Policy Exchange (Link).

Jack Airey and Chris Doughty (2020). *Rethinking the Planning System for the 21st Century*. Policy Exchange (Link).

Institute of Civil Engineers (2020). *A plan for transitioning infrastructure to Net Zero: The policy choices* (Link).

National Infrastructure Commission (2020). *Renewables, Recovery, and Reaching Net Zero* (Link).

Royal Town and Planning Institute (2021). *Net Zero Transport: The role of spatial planning and place-based solutions* (Link).

The Climate Coalition (2020). *Home Truths: How Climate Change is Impacting UK Homes* (Link).

Town and Country Planning Association (2020). *Garden City standards for the 21st Century: Guide Four: Master planning for net zero energy* (Link).

UK Green Building Council (2019). *Net Zero Carbon Buildings: A Framework Definition* (Link).

William Nicolle, Benedict McAleenan and Ed Birkett (2020). *The Future of the North Sea: Maximising the contribution of the North Sea to Net Zero and Levelling Up*. Policy Exchange (Link).