



Land Use in England Committee

Corrected oral evidence: Land use in England

Monday 16 May 2022

3.30 pm

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Members present: Lord Cameron of Dillington (The Chair); Baroness Bakewell of Hardington Mandeville; Lord Borwick; Lord Curry of Kirkharle; Lord Goddard of Stockport; The Earl of Leicester; Baroness Mallalieu; Baroness Redfern; Baroness Young of Old Scone.

Evidence Session No. 10

Heard in Public

Questions 112 - 118

Witnesses

I: Dr James Richardson, Chief Economist, National Infrastructure Commission; Jane Healey Brown, Town Planning Skills Leader for the UK, India, Middle East and Africa, Arup.

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Examination of witnesses

Dr James Richardson and Jane Healey Brown.

Q112 **The Chair:** Welcome. As I said to you outside, this is the 10th evidence session of the Land Use in England Committee. You have in front of you, which you did not necessarily read, a list of the interests that have been declared by members of the committee. The meeting is being broadcast live via the parliamentary website. A transcript of the meeting will be taken and published on the committee website, and you will have the ability to make corrections where necessary, or where you wish, in that transcript. Thank you very much.

Perhaps I could ask the first question. What is your assessment of the future infrastructure and development needs in the UK, and what are the likely implications of that on land use, bearing in mind we are a land use committee?

Dr James Richardson: Shall I kick off on this, since this is our core business, as it were? Perhaps the easiest way for me to try to answer this is in terms of the national infrastructure assessments that we produce as an institution, which very much try to answer at least the first part of your question. We produced one in 2018, and we are in the process of producing the second one, which will come out next year. These are very much designed to look at what the country's infrastructure needs are over a 30-year horizon.

What did we say were the core areas for infrastructure in 2018? I will not go through all the detail but will just cover the headlines. These were things such as full fibre, renewable energy, decarbonising heat, energy efficiency, a new network of chargers for electric vehicles, more infrastructure for recycling, more urban transport, and greater resilience against the risks of drought and flood. We also put forward recommendations that were perhaps more in the governance and funding space: for example, proposing what has become the UK Infrastructure Bank, and proposing that major infrastructure projects should have design panels and champions on them.

Now here we are, looking at the second one. Inevitably, some of those issues are very long term. We are not going to return to them if action is taking place, but some issues come up again. The net-zero agenda is again very firmly among the priorities we have set out and the key things we will look at. We are looking at the needs of the electricity system, particularly security of supply and the need to decarbonise by 2035. Heat for domestic and commercial buildings remains a huge challenge; most of that is currently provided by natural gas, so decarbonising that will be a substantial infrastructure challenge. That also relates to energy efficiency in buildings.

We will need new infrastructure networks for hydrogen and carbon capture and storage. We will also need a new infrastructure network around engineering greenhouse gas removals, so removing CO₂ from the atmosphere and storing it permanently, which we put out a report on

about a year ago. We are looking at the circular economy and an increase in the ability to maintain materials in the economy rather than having them go to waste; surface water flooding issues; urban transport in the post-Covid environment, with potentially a big change since last time; and intercity connectivity. On digital, we looked mostly at fixed and fibre last time; this time, we will probably look more at mobile networks.

Inevitably, quite a lot of that makes relatively little call on land use. Fibre is very important for the economy, but it does not really use up a lot of land. Large-scale land use will be needed mostly in the energy space, because some renewables are quite substantial users of the land, such as solar and onshore wind.

There are some corridor uses, which by and large do not take the land out of use, but I think of the transmission network. Energy will be generated in different parts of the country than it is today. A lot of it will be generated in the sea. Of course, that energy then has to be transmitted from where it is generated to where it is used. It will still be used in mostly the same places—the great cities, towns and villages of our country—but that will require a lot more cabling. That does not really use the land. You can still use the land under the pylons, but it will have an impact on the land environment.

The Chair: You did not mention housing in all that.

Dr James Richardson: Housing is strictly outside our remit.

Jane Healey Brown: First, it is really important to think about what we are trying to achieve with regard to the need for an infrastructure development and, therefore, the land use implications. James has talked about net-zero climate change challenges and specific aspects. Then there is biodiversity, the housing need that you mentioned, and levelling up. Those four key sets of objectives that we are trying to achieve from the government agenda are the starting point for what we need from development, infrastructure and land use. The questions you set for this session focus particularly on the first two, but they need to be looked at in parallel with the second two, housing need and levelling up, because they all have significant land use and infrastructure implications.

Focusing on the net-zero climate change and biodiversity points, it is important to recognise that policy is somewhat lagging behind those objectives. As it stands at the moment, the planning system, which is my background, says very little on net zero, so land use is unlikely to actively deliver that. The requirement put on a number of key statutory agencies also holds them back, and I can expand on that when we come to the question on biodiversity net gain.

Secondly, it is important to think about the infrastructure that we have inherited. A lot of infrastructure is nearing capacity and is increasingly holding back or slowing development, particularly housing supply. The lags in delivering social and transport infrastructure are often what drive opposition to development, particularly housing development. Ageing

infrastructure and infrastructure capacity are significant factors in the cost of development, particularly in northern cities, and have been for decades now. Those infrastructure development needs will result in greater pressure on greenfield and green-belt land if we are not able to address the infrastructure challenge in our brownfield sites to make them viable, so the land use implications of not sorting out what we have inherited with our infrastructure network will be more significant.

There is a final point about the resilience of our infrastructure networks. We have been working with the National Infrastructure Commission on looking at significant concerns raised through a consultation on the state of infrastructure networks, capacity points and vulnerability to occurrences of extreme weather events, which will increase with climate change.

Q113 Lord Curry of Kirkharle: I would like to explore a little further the impact of climate change and the Government's net-zero targets on our future energy and infrastructure needs. How does the Government's recent energy security strategy fit into this picture?

In another House of Lords committee, in which we looked at the issue of energy use, there was deep concern about whether our infrastructure was fit for purpose, and that a huge investment was needed in order to address these challenges. I just wondered whether that was your view and whether you think it is doable.

Dr James Richardson: Picking up where you ended, it is a huge challenge. There is a need for a huge amount of investment in energy infrastructure. Energy infrastructure lies at the heart of the net-zero challenge. It is not the whole challenge, but it is a very large part of it. Once you add up the electricity system, heating and the energy that goes into transport, you have about two-thirds of emissions across those sectors. It is a very large part of the net-zero challenge. All that has to be transformed by 2050, and a fair amount of it on a tighter timescale than that to meet the sixth carbon budget.

By 2035, we essentially have to have a net-zero electricity system. Is that doable? I think it is. I should perhaps fess up and declare that I am a permanent optimist, but we should in no way underestimate the challenge. In the electricity system, we have to build very large amounts of predominantly renewable sources, build the transmission networks to connect those to the sources of demand, and upgrade the distribution networks so that people can install electric vehicle chargers and electric heat pumps in their homes. We have to do a fair amount of that by 2035 while keeping the lights on.

We then have to change the heating system in basically every house in the country, and at the moment we do not have options that are as good and cheap as the gas boiler. We then have to convert the entire vehicle fleet to electric, or perhaps, for some of the heavier vehicles, hydrogen or other fuel sources, but predominantly electric.

A lot of progress has been made, which shows that you can move these things quite quickly. About half of the electricity that is generated in the UK today is low carbon. Rolling that back, even 10 years ago the figure would have been much less, and 20 years ago it would have been practically none, apart from the nuclear power stations.

A great deal has happened, and we have seen very large transformations of our energy system happen in the fairly recent past over quite quick periods. The electricity system doubled in size in the 1950s, and then again in the 1960s. We converted from town gas to natural gas in about 10 years from the late 1960s to the late 1970s. These things can be done; we are really starting to see electric vehicles taking off, but they require real urgency. As Jane was saying a second ago, planning delays and these kinds of things are a real potential obstacle to getting this done. It gets done only if we all decide to do it and get on with it.

The Chair: James, are you involved with getting the power from the North Sea on to land?

Dr James Richardson: No, not directly.

The Chair: I see there has been a judicial review about bringing it, because there is pretty good chaos at the moment. Everyone is coming ashore everywhere as opposed to centralising it and bringing it ashore in one. What is preventing that infrastructure from happening?

Dr James Richardson: There is a process to sort that out called the offshore transmission network review. I am not involved in it, but it is run by Ofgem, BEIS and the system operator. They are essentially trying to map out how you build a grid in the North Sea, which would then mean that you could bring in that power in a much smaller number of places. Bringing larger cables into fewer places is obviously the right approach. The current system was designed in a world in which we did not know whether offshore wind was going to be a large part of the power system. Now we know that, and it makes much more sense to do that in a co-ordinated way. That review is due to come out with its conclusions over the summer. One might wish to take a certain scepticism about the timeline of government seasons, but I hope it will be fairly soon.

The Chair: Will it be built before the wind farms?

Dr James Richardson: That is the challenge, but the real challenge is planning, not the ability of the industry to get it built.

Jane Healey Brown: I have a number of thoughts in my head on that. On the net-zero climate change challenge, the reduction in carbon and the things James talked about, the electrification of heating and transportation in particular but also other technologies, are not necessarily significant from a land use point of view. The challenge is the delivery mechanisms.

I would also suggest that we need to look more strategically at the reduction in use of existing urban environments and future design of

urban environments, not only to focus on the technology transformation, but to look at a more systematic transformation of how we operate our urban environments.

Q114 **Baroness Redfern:** James, we have talked a lot about challenges. Challenges come up in nearly every sentence, but what are the challenges and opportunities for delivering biodiversity net gain? Why do environmental net gain for big infrastructure that you touched on earlier and development projects? Finally, what changes, if any, could help ensure that we get a better outcome for nature while avoiding a one-size-fits-all approach and challenging multifunctional solutions?

Dr James Richardson: How about I start by talking about opportunities, so that I stop talking about challenges quite so much? There are big opportunities here. Infrastructure is a major contributor to some of the things that impact on biodiversity, such as noise, air and water pollution. There are solutions at least to reduce those impacts significantly, and they are often tied up with the same solutions that help with CO₂ emissions. Electric vehicles are a great deal quieter than internal combustion engine vehicles. They also do not emit nitrous oxide. An electric heat pump does not emit air pollution in the way a gas boiler in your home does.

Surface water flooding, which we are currently doing a study on, is the same system that causes sewage overflows into rivers. Part of the challenge with the overflows and flooding is that the same pipes are dealing with both drainage and sewage. Separating that out would be extremely expensive and difficult, but interventions that can reduce the risk of flooding can also reduce the risk of polluting the water courses. There is a lot that can be done.

Perhaps to your point about being multifunctional, we need to build some things that, if done right, will offer big opportunities for nature. If I can go back to solar farms, we need to build a substantial amount of solar power in this country. It is a very cheap form of renewable energy. That has a land use, but solar panels do not sit on the ground; they are elevated above the ground. Wildlife can flourish underneath them, and you can create an environment that is essentially fenced off, has no use for pesticides or fertilisers, and can be a haven for pollinators, ground-breeding birds and so on. You have to manage that correctly to achieve that. It will not necessarily just happen, but there are big opportunities there to see some of these investments that we need as opportunities for nature.

What are the challenges that get in the way of that? It partly comes back to the complexities of the planning system and these things being looked at often in a fragmented way. I will not claim to be an expert on biodiversity, but the connectedness of habitats is a very important Lawton principle. If you look at each scheme in isolation, it can be harder to put that together than if you think of these things more strategically. There is a question about getting more understanding of what is really important, getting a clearer hierarchy of that, as the Office for

Environmental Protection was saying in its report only last week, and having a more strategic approach to this so that you can get that more joined-up and coherent approach.

Baroness Redfern: To have a good understanding, as you say, you have to have the right data and information to get a really informed debate about trade-off as such.

Dr James Richardson: Absolutely, yes.

Jane Healey Brown: Biodiversity net gain has potentially significant implications for land use because of the likely quantity of land that will be required for offsetting, locking up land for that use for 30 years or more. Perhaps a greater understanding of the implications of that is needed. There are opportunities to do that, but we need to look at both the policy and the delivery mechanisms. We also need to think about what we are trying to achieve. The focus and the name are about biodiversity, but there are also opportunities for things such as carbon sequestration that we need to consider in this.

If we start with the policy requirements, given the large scale of land that is needed, the opportunities to look at locations for larger-scale nature-based solutions are significant and could give us some positive long-term interventions. You are looking at the creation of wetland habitats to improve on flooding impact, for example, and to support carbon capture. James also gave examples of integrating. That supports the need for strategic planning and looking at land use strategically to address those challenges. Delivery issues need to be looked at alongside that. It is unlikely that the market will be in place to deliver the required quantity of land for biodiversity net gain offsetting, so we need to consider whether we need compulsory acquisition mechanisms to enable that to happen.

We also need to look at local authorities that will implement this. We estimate, from work we have done, that 60% to 70% of local authorities lack in-house expertise and capacity around ecology and biodiversity. Investment and scrutiny are needed from the likes of Natural England about how developers' proposals for biodiversity net gain are genuinely delivering.

I also wanted to talk about the restrictions on some of the national agencies that make it quite challenging for them to deliver biodiversity net gain. There is an opportunity if we can unpick that. This is a very specific point, but nationally strategic infrastructure projects are not currently required to deliver biodiversity net gain. They are still being asked by inspectors what is being proposed.

A lot of the national agencies want to do the right thing with good practice of delivering. However, because the likes of National Highways are not required to deliver biodiversity net gain, they cannot acquire land to deliver biodiversity net gain because they can acquire land only for policy-compliant purposes. They are then only able to deliver biodiversity net gain on land they already own, which is more limiting, but they are

also not then set up as an organisation for managing the delivery of that. If we could unpick that and link up with other major landowners, such as water companies, there could be a very good opportunity to address the issue that these agencies have and end up with land that is more effectively managed for biodiversity net gain purposes.

Baroness Redfern: From that, I take it that when you are designing your projects, the fundamental point must be to deal with any land losses, because we cannot afford to lose acres and acres of land. Is your main point in designing your projects making sure that you reduce land losses?

Jane Healey Brown: From a biodiversity net gain point of view, it is looking to maximise the opportunities for biodiversity net gain. The challenge is that, for those national strategic infrastructure projects, you are limited to doing that in the land that is already owned by those agencies, which is an unnecessarily limiting factor.

The Chair: Thank you very much. That was a very interesting point about the compulsory purchase schemes. I had not become aware of that.

Q115 **Baroness Mallalieu:** What role can a multifunctional approach have in infrastructure delivery? Do some forms of infrastructure projects lend themselves more readily than others to this, and what kind of projects could do that?

Dr James Richardson: Shall I have a bit of a go?

Jane Healey Brown: Yes. We had a good discussion outside on this earlier.

Dr James Richardson: There certainly are opportunities, particularly in certain areas, such as flood risk mitigation. Jane mentioned a second ago that you can use flood risk mitigation that also serves as, say, wetlands, or, in a more urban environment, provides recreational land. There are opportunities where you are using land for infrastructure to think about what else you can use that land for at the same time. Obviously, flooding has the particular advantage that you are not using the land 24/7, as it were, so it is easier to think about using that land for multiple purposes.

There is probably a broader range of things when you are designing in an urban realm, where good design of infrastructure can also have a series of values for the population. That might also involve environmental benefits. Again, going back to the flood area, some of that might be very localised. Simply having planters on your pavement can soak up rain in very heavy rainfall and so on. There are ways of doing that.

There are also things that are quite mundane in a sense, but they can reduce the demands of infrastructure on the environment. Lamp posts are a very good opportunity, because they can double up as electric vehicle charge points. They may also be useful for 5G mobile networks.

You can hang a 5G cell off a lamp post; they are quite small units. That would save you then having more posts on your street.

Kerbs are multifunctional infrastructure. They serve to separate people from traffic, but they also divert the flows of water in heavy rain. Some of these things are quite simple in a sense, but they speak to the need for good design, which we have tried to push as a commission. We have an infrastructure design group. We have recommended that projects have design champions, and the things that really matter here are often about good design. You can make something have multiple purposes if you think about it carefully at the beginning rather than thinking, "I've got this problem to solve, and I'm going to go and solve this problem, and everybody else can solve their own problems".

Baroness Mallalieu: Can you do that already anyway voluntarily, or would you need a structure? Would that make a big improvement?

Dr James Richardson: It is more about a way of thinking and having the right skills in the right conversations. There is no impediment to doing it. As Jane said, there can be issues for specific bodies with these things. If I were a local authority planning a streetscape, nothing would prevent me thinking about all these things, but it requires the people involved to come at it from that design perspective. Obviously, it helps to get people with design experience into those processes.

Jane Healey Brown: James gave lots of examples. We could have lots of them, including how to deal with waste heat and energy generation. They are often more challenging due to viability.

This comes back to how it is delivered. We work with a lot of infrastructure organisations in a very siloed way. They do not have the need to come together. The opportunity to start getting the best out of the assets and getting more from them is to have a place-based approach. If you think about what we are trying to achieve, it often comes under the four categories I outlined in response to the first question. If we then think about what we want these assets to do in order to challenge ourselves and address these problems, we need to take that place-based approach to understand. It is really challenging, because we are not set up to do that organisationally at the moment.

There are some examples of this happening. I have been involved in some work in Greater Manchester, where we brought the utility companies together as part of the Greater Manchester Strategic Infrastructure Board to develop an infrastructure framework. We are now playing that out with some of the larger development sites. The Greater Manchester Northern Gateway is the single largest development site in the conurbation, and there is now a deliberate emphasis on bringing those organisations together. There is a project infrastructure group focused on getting the best from the assets and getting an integrated approach through delivery of projects on that site.

Learning from that is an opportunity. We had the Levelling-up and Regeneration Bill last week, which introduces local infrastructure delivery statements that local authorities will be required to produce. They are intended to set out how the local infrastructure levy is to be used. There is an opportunity in the guidance that could be produced to those to think about how you can have a place-based approach to multi-infrastructure delivery.

Q116 Lord Borwick: What is your assessment of the system we have for democratic engagement for long-term decisions about infrastructure? Is there any democratic engagement for long-term decisions on infrastructure? Can you expect voters to have an opinion on an offshore electricity collection system such as you mentioned, or even on an HS2? There were various changes to the design of HS2, with insistence that bits of it be tunnelled, but that was about the only input into it.

Jane Healey Brown: I was involved with the consultation on HS2, which was quite an extensive programme. I will start by saying that any long-term or strategic project is inherently difficult to engage with communities on because of the ability to understand what it means for them. HS2 was an example where we worked very hard to try to make it relevant to people, so that they could understand the impact it would have on them. That involved a lot of visualisation and sound-based work so that you could go into an immersive environment at a location of your choice to understand the impact visually and from a sound perspective. That is a physical piece of infrastructure that you can express in those terms, and it can really help people to dispel myths and fears, but we have to accept that it is really difficult to engage with people about anything that is strategic and long term.

Lord Borwick: You put a lot of work into it, but your assessment is that you were not terribly successful in getting them engaged.

Jane Healey Brown: There was a very high level of engagement.

Lord Borwick: Did you change anybody's opinion with this process, or were the objectors at the beginning objectors at the end?

Jane Healey Brown: You will inevitably end up with a spectrum. You will have those who object from beginning to end. You will have those who accept from beginning to end. There is always a middle group for whom it is about dispelling myths and helping them make informed decisions. That is what consultation should be about, for those who want to understand it and who can then input into any changes to mitigate the impact upon them. Sometimes they are possible; sometimes they are not, but good engagement should be about making it real for those people and the implications for them.

Lord Borwick: From talking to people involved, one of their takeaways at the end of this really hard work was that they should never get involved in democratic engagement again. They had learned so many lessons about how difficult it was. They had underestimated how difficult

it was to get people through this process and they did not want to do it. Was that your assessment too?

Jane Healey Brown: We always have to try, and we always have to learn from those attempts. I increasingly feel that the communication of what is being proposed rather than the technical explanation is where challenges come to bear. You mentioned HS2. If you look at the strategic planning for Greater Manchester spatial framework, as it was called, now known as Places for Everyone, the communication of what was proposed there was what caused the challenges, rather than necessarily the proposals. We need to get better at managing the communication with people as much as the technical information.

Lord Borwick: In future, should there be more or less democratic engagement? Should there be votes on this and, if so, by how many? What sort of an area should be involved in the voting for an infrastructure project? Is it not in the nature of an infrastructure project that it has effects other than very local ones?

Jane Healey Brown: This is where a voting approach becomes very problematic.

Lord Borwick: It becomes impossible, does it not?

Jane Healey Brown: It would, and it is not just the geographical extent; it is the temporal extent as well. It is very difficult to engage with people who will benefit from some of this infrastructure in 30, 40 or 50 years' time. When I lecture on consultation engagement at the university, I tell the masters students to always avoid putting the cart before the horse in engagement. Make sure that you know what you want to engage with before you decide who you will engage with and how you will go about it.

Lord Borwick: That sounds like very sensible advice indeed.

Jane Healey Brown: There is often a jump to the "how"—a voting system or whatever it might be. We need to ask the questions in the right order.

Dr James Richardson: Obviously, votes take place here in Parliament on many of these schemes. That is probably the right forum, rather than trying to identify the group of people who are affected—as you say, that might be the whole country. On infrastructure, it is not so much about saying, "Here is a large scheme like HS2"; it is much more of a transformation. We want full-fibre broadband or higher rates of recycling everywhere.

On those kinds of issues, there is how you engage people while you are thinking about the policy. You are not asking, "Do you want this thing built next to your home?" You are asking how willing people are to separate their waste, have separate food waste collections and so on. You can have these conversations with people. You may need to spend some time doing that, so you are not having it with everybody, but you can engage people on these questions and explain the pros and cons. People

can then help inform your thinking, so that you do not come out with a set of recommendations that the public as a whole are not willing to accept.

We do quite a bit of that in our processes when we go out and engage people before we have decided what we think, to see what people's responses are. On the questions about waste treatment, back in 2017 or 2018 when we were doing the first assessment, we were quite surprised by the strength of feeling among people that we needed to do more, so it pushed us to make more ambitious recommendations than perhaps we would have done if we had just talked to ourselves.

Lord Borwick: On the waste example that you gave, did you not come to the conclusion that an awful lot of people are thoroughly in favour of a waste processing plant unless it happens to be near their house?

Dr James Richardson: You always face these challenges, and there is no simple way through that. In the end, there are trade-offs. You have to have decision-makers, which is what we have a planning system for. You cannot make that problem go away by inventing some new governance architecture around that.

Lord Borwick: You cannot do it with a democratic structure either.

Dr James Richardson: You are facing a trade-off between the public good and the local cost, and there is no simple answer to those kinds of questions.

Lord Borwick: That is rather my feeling too.

Q117 **Baroness Young of Old Scone:** You have talked a bit about silos, and there have been proposals from previous witnesses about having some sort of comprehensive land use framework in which these siloed decisions might take place: "We have to build a network for carbon capture and storage. This is where it will go. And how can we maximise the other benefits that it might bring?" There might be some means of saying, "Where is the best place to put these big pieces of infrastructure?", and indeed other developments such as high-quality agriculture, technologies for reducing carbon for nature—the whole lot. Is such a framework possible, bringing all the land use demands together? If so, what would the impact be on thinking about infrastructure?

Jane Healey Brown: I am in two minds on a lot of this. On balance, my view is that we need some element of national decision-making, but only by exception where it is not more appropriate to do so at either a local or a city regional scale. It is where it addresses those national issues that need to be addressed at that scale. Those challenges relate to climate change, net zero, the housing shortage and levelling up, which could include reallocating growth to address levelling up and reallocating development to address challenges of flood risk. This feels more like a national strategy than a framework or plan, because we are at risk of getting very tied up if we go into unnecessary detail on the sorts of things that we talked about, such as democratic accountability or the evidence

needed to inform those decisions. This is what particularly slows down the local plan making that we experience at the moment.

I look back to when we had the regional systems, regional spatial strategies and regional economic strategies. The model of the regional economic strategies perhaps more closely aligned the sorts of things that you have outlined, in that it talks about what is needed at the strategic level for economic environmental infrastructure purposes and looking at where there may be locational requirements as to where they should go.

We need to look at what mechanisms we have at the moment, how far they already do that and whether we need something else. We have the national policy statements that deal with some of the major infrastructure requirements. Yes, a lot of those need refreshing because they are becoming quite out of date, but we also have the opportunity for the new look at the National Planning Policy Framework, which again is mentioned in the Levelling-up and Regeneration Bill. We need to make sure that all these things are aligned. It does not necessarily preclude having some elements that are set out in a national framework, as long as we are clear that they do not touch on what are better delivered at the regional and local scale.

Dr James Richardson: Let me offer a couple of points. One challenge is inevitably the relative scale of different uses of land. The entire built environment—infrastructure, housing, offices, factories, the lot—is about 8.5% of land use in England and slightly less across the United Kingdom as a whole, while 91.5% is made up of largely agriculture and forestry. Any process that has to balance the needs of infrastructure, which is maybe half of that 8.5%, against the 91.5% will always struggle, because in trying to compare the interests of land use for agriculture and forestry against the interests for infrastructure, you are looking at very different spatial scales. It is difficult to balance that in one overarching process. Infrastructure is not very important to land use, but land use is very important to infrastructure. Getting governance on that would inevitably be quite challenging.

If I think about your example on carbon capture and storage, it is very important to think about the spatial extent of a CCS network. If I am a cement factory, this is pretty much the only option I have to decarbonise. If I am located in the middle of England, am I going to have a pipe? Am I able to ship CO₂ out in a truck, on a train or by sea, or do I have to move my factory? They are big spatial questions, but the total land use that the CCS network would take up is tiny, not least because the pipes are likely to be buried anyway.

This is also not a substantial physical infrastructure in the sense of numbers of hectares that it would use up when looking at the whole land use of the United Kingdom. Looking at Teesside, it might be important in that area; looking at the United Kingdom or England, it will be a tiny amount. It is quite hard to balance those different spatial scales in one process.

The other inevitable challenge, particularly in the energy space, although it applies in some of these other things, is that I could see the advantages of that strategy, if I had it today, because I could say, "Right, we're going to put solar here. We're going to put onshore wind here. We're going to build a grid that fits that". We would be able to make decisions more quickly. Putting that strategy together sounds to me like something that could take many years and quite a lot of court cases before it was completed, and we do not have the time to wait in order to get to net zero. We need to be able to take action now, so we need to operate in the existing planning system. If that process creates blight for the system, which new processes often can, the risk is that it delays decisions that need to be taken right now to get on with it, even though, if I already had that process in place, it might make those decisions easier to take.

Jane Healey Brown: Yes, that is right. The advantages would be there, but the disadvantage would be the process of getting there. Can we get better use of the NPSs and the update to the National Planning Policy Framework in order to deliver what we need? It may well be that, through that, you have a summary that brings together the NPSs in particular, but some of the updates to NPS and NPPF could have greater impact.

From an NPPF point of view, the public perception of the role of the green belt, as an example, is very different from what is in the NPPF, but the ability of the green belt to help to address and have a role in climate mitigation, adaptation and biodiversity is significant. If we align NPPF, which is currently very quiet on net zero, with those objectives, we have a much easier and quicker route to delivery.

Baroness Young of Old Scone: Could I just explore some loose talk that is around at the moment? James, the last time I had a conversation with the National Infrastructure Commission, you had discovered net zero, and that was a very good thing. I am not sure that you have yet been tasked with having a biodiversity recovery objective. Is that the case?

Dr James Richardson: We are half way when it comes to the objectives that have been set for us by the Government. We have been given a specific objective on net zero and climate resilience. We have not been given a specific objective on biodiversity, but we have been tasked with considering the interactions between infrastructure and the Government's targets on biodiversity net gain. That gives us more remit to look at these questions of biodiversity in terms of the impact of infrastructure. It does not give us a remit to start from the question, "How do I deliver biodiversity net gain for the UK or for England, and where does infrastructure sit in that bigger picture?" It is very much the other way around, in that it asks, "If we are looking at infrastructure, how can we ensure that contributes to biodiversity net gain?" We have now been tasked with looking at that half of the question.

Lord Curry of Kirkharle: Could I just explore a couple of James's

comments? One was about solar farms and the possible biodiversity benefits that they can deliver. The other was that this is too urgent to wait for a national land use strategy, because we need to get on with things. We all drive past solar farms on grade 2 land and think, "Is this a good site for a solar farm?" It may be delivering biodiversity benefits, but it is also doing that on highly productive agricultural land. Is there not a need for some national guidance on the most appropriate site for these large projects?

Dr James Richardson: The answer is yes, but it can be done through the national policy statement. As far as I am aware, it does cover the use of high-grade agricultural land and says that solar farms should not be put on it. That is the new draft that is working its way through the system, so it may not have been covered in the existing framework. That statement is certainly designed to answer some of these questions.

Nobody thinks that we should put solar farms on high-grade agricultural land, but I am talking about a separate process on top of that and the impacts that might have on the timeliness of decision-making, particularly in things such as solar. I can build a solar farm in a couple of months if I can get permission for it, but it might take me several years to get permission for it. Of course, every solar panel is a little less gas.

Baroness Young of Old Scone: Could I ask a quick question of either of you? A one-word answer will perhaps do, but you can go on a bit more if you want to. There has been loose talk about giving the National Infrastructure Commission the job of being the land use framework developer and holder for the nation. Is that sensible, and do you want to do it?

Dr James Richardson: The challenge is back to this issue of 91.5% versus 8.5%. In a sense, we do not do anything in the 91.5%. We worry about mobile connectivity on that land, but most infrastructure is about the built environment. We just do not have the expertise in areas of agriculture, forestry or, indeed, housing, which is outside our remit. It is not obvious to me that we are the right body. Perhaps it is an insider view, but we have quite a lot to deal with already. It is always flattering to be asked to deal with other things, because it implies that people at least think you are not totally hopeless, but it would be a significant change in our remit.

Jane Healey Brown: Land use policy is so complicated, which is why planning deals with it, because it brings together the diverse technical aspects to make a decision. To ask the National Infrastructure Commission to do that would be significantly beyond its remit and expertise. However, if it was about a national infrastructure strategy and the land use implications, it would be a different matter and could be more readily considered.

Baroness Young of Old Scone: If a job was going spare to devise and be the ring keeper on a national land use strategy as opposed to a national infrastructure strategy, and you are saying it should sit with the

planning system, where would you put it nationally in the planning system?

Jane Healey Brown: It would need to sit alongside the NPSs and NPPF in the current remit of DLUHC.

Q118 **Lord Goddard of Stockport:** This question is probably to Jane. How would you view the national framework for land use, and how might it feed into your projects?

Jane Healey Brown: It goes back to some of the things I said a moment ago. I can see where it could add value and make decision-making easier, but it becomes challenging in terms of the evidence that would be needed to create it in the first place. Therefore, understanding where it is adding value above and beyond what we have at a local and regional level is the test as to what content should be in that and what is covered, or could be covered, by the updated NPPF and NPSs. Does that give us the route to deliver what is needed?

Lord Goddard of Stockport: For your particular projects with Arup, is that a positive or a negative?

Jane Healey Brown: It would determine decision-making, because you would have to have regard to it, which would give certainty. From looking at development, you always look to have that certainty so that investment can take place. However, you want to ensure that that certainty is not tripped up by adding to complexity if there is the potential for contradictions between what is in the national framework and the other mechanisms I outlined, as well as local policy.

The Chair: Thank you very much. It was very kind of you to come and give evidence to us. It was a very good session.