

Environmental Audit Committee

Oral evidence: National Highways and environmental sustainability, HC 1284

Wednesday 3 September 2025

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Members present: Mr Toby Perkins (Chair); Olivia Blake; Julia Buckley; Barry Gardiner; Anna Gelderd; Pippa Heylings; Chris Hinchliff; Martin Rhodes; Alison Taylor; Cameron Thomas; John Whitby.

Questions 1 - 27

Witnesses

[I:](#) Nicole Hillier, Principal Policy Advocate, Infrastructure, The Woodland Trust; Kevin Martin, Head of Tree Collections, Royal Botanic Gardens, Kew.

Examination of witnesses

Witnesses: Nicole Hillier and Kevin Martin.

Q1 Chair: Welcome, everybody, to the first meeting of the Environmental Audit Committee post-recess. We have a one-off session today on National Highways and environmental sustainability. We will have three different panel meetings over the course of today's session. I am very pleased to say that in the first of today's panels we are joined by Nicole Hillier of the Woodland Trust and Kevin Martin of the Royal Botanic Gardens at Kew. I will invite you, starting with you, Nicole, to introduce yourself, your role within the organisation and your particular area of knowledge with regard to the subject we are discussing today.

Nicole Hillier: Good afternoon, everyone. I am Nicole Hillier and I am policy advocate for infrastructure at the Woodland Trust. My role encompasses policy for infrastructure, such as road, transport and energy projects. In this instance I am obviously focusing specifically on National Highways schemes, looking at their environmental commitments and trying to influence better decision making for trees and woods.

Kevin Martin: I am Kevin Martin, head of the tree collections at Royal Botanic Gardens, Kew. I am also a researcher at Lancaster University. My specialism is looking at tree selection under climate change, and at urban trees, the effect of climate change on urban trees and their establishment.

Q2 Chair: We are going to talk first about biodiversity net gain in general and then get into more specifics around tree planting. Nicole, to what extent do you believe that biodiversity net gain is at this stage a successful policy? How should it be improved, particularly with regard to tree planting?

Nicole Hillier: At the moment, the trust is supportive of BNG as policy, because it has real potential for gains for nature when we are considering big infrastructure projects. There is a lot of opportunity for really good gains for nature. At this point, as BNG is not quite bedded into the system yet, there are some really good examples of where BNG can deliver, but we are still at that teething stage of the policy. With a little more time, we will get a bit more of a flavour of how well it is doing.

From some of the evidence we have collected internally and commissioned, we have seen that, from a Town and Country Planning Act perspective—so it would not necessarily cover National Highways schemes, but from a trees and woods perspective—it appears to be disincentivising developers from removal of woodland planting due to the requirements to replant and the compensation required. On the flip side of that, trees and woods are not necessarily getting planted as part of the compensation packages as part of BNG because of the long establishment times required, so we are seeing fewer trees and woods being planted as



a result of BNG requirements. It is a bit of a mixed picture, but we hope to see BNG improve and get more credence as we go through.

Q3 Chair: Are there any specific things you would point to in terms of tree planting that the Government or anyone else should be considering to improve the situation?

Nicole Hillier: It is possibly more like incentivising the planting of trees and woods. In a broader sense, there is the way that trees and woods can be incorporated into development more widely and that policy behind pushing for trees and woods being a bit more embedded. It is making the case for street trees and things like that, not necessarily needing to plonk a woodland at the edge of a development, but introducing trees into landscapes and soft infrastructure that could then hit those BNG targets, while also contributing to healthier streets and bringing nature across a development rather than just at the edge. Encouraging developers to put trees and woods into BNG across a development would be quite an easy way to get trees and woods more embedded in that policy.

Q4 Chair: Mr Martin, from your perspective, how successful a policy do you think BNG is currently? Are there any particular improvements that you would advocate beyond what we have just heard with regard to tree planting in particular?

Kevin Martin: As a policy it is a good thing and we are going to see more planting and better green infrastructure. Where we need to think about adapting is the species. In a lot of the research work that we have done, there has been a big emphasis especially on English natives. That is fine as a direction but, when we start looking at local-provenance seeds, we know those trees are going to struggle.

When we look at the data that we have, especially from the research that we have done using models, but also functional trait data, we know that a lot of our native trees are going to really struggle under future climate scenarios. They do not have enough plasticity within their system to deal with this summer, for instance, where we have had the hottest and driest summer. The concern that I have is that we have to be careful about what species composition we start to plant, but also the sources of those seeds and where they are coming from when we look at commercial nurseries.

At Kew, we have done lots of plant collecting expeditions in recent years based on the modelling data. Some of that is looking at what we all perceive as an English native species, but we look at the varied range. Through the modelling data that we have, we know that the predicted climate and growing conditions, especially of urban London, are very close to the very extremes of what these trees can grow in.

For instance, we started selecting seed from Georgia—the country—up to the Azerbaijan border and Romania. The reason why is that, when we look at their climate data and the predictions for London, those trees are



already growing under those conditions. Genetically, they have adapted to have that plasticity. Where we really need to gather pace in influencing the commercial nurseries to make sure we are providing the right stock to enable the planting and the mass planting for big projects under BNG.

Q5 Chair: What are the key factors that affect survival rates for newly planted trees?

Kevin Martin: It is complex. It is very site-dependent. It depends on your growing conditions. If we look at most urban environments, for instance, it is water stress. We only have to look at this summer: we have had very little water and high heat. We know that, with plants, especially trees, it is the humidity. Because we have had a lack of rain and high heat, especially in urban environments, we have very dry air. That is driving the water demand.

The real issue now is making sure we have the appropriate species selected, but also how we deal with the planting. We need to make sure that the soils are the best that we can make in that area and that we understand that, and understand how the future climate is going to sit in that site to make sure we are selecting trees as best we can.

Also, if we are going to push for green infrastructure, we need to start thinking about upskilling the whole workforce. That is where we are really lacking. It is fine for people like me who are researchers, because we have this detailed knowledge, but this needs to be used not only within academia; it needs to be for practitioners. We really need to start thinking about the next generation and how we plant and care for trees. That is where we need to focus also.

Q6 Chair: Yes, absolutely. Expanding with regard to climate change specifically, you have referred to the amount of water that is available and water scarcity. What are the other climate change aspects that can affect survival rate, if any?

Kevin Martin: We are seeing that when we look at this under modelling scenarios, we have to look at multiple variables. When we look at our soils, for instance, that is very important because the water-holding potential of those soils is critical for how that tree will establish. For instance, if we have a really free-draining soil and it has very little water-holding capacity, those trees will be affected very quickly in drought. When we look at those trees, they would need more maintenance, a better irrigation management plan and more soil amendments in order to build up that moisture-holding capacity within that soil volume.

It really is understanding our growing conditions and how we need to adapt. A lot of this is through adapting our soils and understanding how dry those soils are. For instance, if we are planting on a clay soil, that will have a higher water-holding potential. Therefore, a species that is vulnerable to drought will be supported for a longer period of time.



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We have to remember, especially with climate change, if we project what we see this summer and saw in 2022 out to 2100, these summers are going to become more normal. Instead of it being a one-in-10 or one-in-20-year event, they are going to become one in three or one in five. That is a concern, because trees deal with stress differently. If you have a tree that we would call a stress tolerator, it has the mechanisms inside its structure to deal with those long, hot periods. When we see a stress avoider, they do not have it.

The false autumn that we are all seeing in the media and is being explained in the media at the moment is due to drought stress. Some trees are under so much stress and water stress that they are in their very last survival strategy, which is to drop their leaves. In an urban environment, if you have a plant that is dropping leaves, that is not providing an ecosystem service in cooling that urban environment. That is why we have to be really knowledgeable when we start selecting these plants.

Chair: I have great confidence that we have a knowledgeable person in front of us when it comes to trees. There is no one I would rather have plant me a tree.

Q7 **Barry Gardiner:** Absolutely, Chair. We are talking about trees dying. Mr Martin, why could you not keep the stone pine alive at Kew?

Kevin Martin: Unfortunately, it did not die; that collapsed due to tree decay.

Barry Gardiner: I know.

Kevin Martin: Yes, I know. It was a very upsetting day.

Barry Gardiner: It was my favourite tree in the entire world.

Kevin Martin: *Phaeolus schweinitzii* was the decay organism. It caused cubical brown rot and then structurally it could not hold itself any more.

Pippa Heylings: Well, there is an answer.

Barry Gardiner: But you are taking the seedlings from it and growing some from that.

Kevin Martin: Yes, there is one planted back there now from seedling.

Q8 **Barry Gardiner:** Yes, I have seen that. Very good. Let me turn to Ms Hillier. I wanted to find out why it is that the delivery rates for BNG are so poor. We have heard that developers are failing to deliver on their commitments. I want to ask you why that is happening. Is it that they are sowing things incorrectly? Is it, as we have heard from Mr Martin, that these are not the right seeds to be planting in that particular area? How realistic do you think the development plans are in the first place?

Nicole Hillier: It depends on the scale of the development. There has been some research recently. Wild Justice commissioned a report into



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how successful general mitigation and compensation plans from development were—this was for local housing; I can touch on National Highways specifically in a moment—and found that, out of 40-odd developments, only 53% had actually provided the mitigations and compensations for species enhancements that they planned.

Q9 **Barry Gardiner:** So 47% of the ecological mitigations were missing.

Nicole Hillier: Yes, of which 73% were missing woodland edge planting. They are committing to these things, but they are not necessarily happening in practice. I suppose it could be a mix—

Q10 **Barry Gardiner:** Sorry; I do not want to cut you off but I want to understand. Is it because they are not actually doing what they said they were going to do in the first place, or is it that they tried to do it, but did it unsuccessfully? What is actually going on here? Is it sleight of hand, or just failure?

Nicole Hillier: It could be a mixture of perhaps a few different areas. Depending on who actually plants the mitigation, it might come down to whether they have the correct expertise to make sure these trees establish. Tree planting can be quite precarious. There are a lot of factors that need to be involved in making sure that trees will survive. If they are left out in the sun too long while they are being translocated from the nursery, or not watered or maintained correctly afterwards, those things can affect their survival rates.

It depends, I suppose, on a case-by-case basis on how thoroughly the developer has accounted for and funded the maintenance of these trees once they are first planted. It is also the monitoring to make sure that, if there are any issues with the planting that has happened, they are being picked up earlier rather than later. Obviously, the longer you leave the trees in a stressed state, the harder it is for them to recover. Especially with the summer we have had this year, there have been lots of trees that will have been drought stressed, been left for long periods of time or not being correct on the soils. It depends, as has been previously said, on how suited those trees would have been to the area in the first place. It could be a bit of a mixture of factors.

It is not necessarily that they are not planting them. It might be that some of them have failed; it might be the funding changes, or they have asked for new planning permissions. It depends on that individual development, but it could be a range of factors. We are certainly seeing from evidence that others have commissioned that there are some mitigations lacking. Why that is should certainly be looked into, because these are commitments that they are making.

Q11 **Barry Gardiner:** Tell me this. What resource or skills base do the local planning authorities have in order to ensure that all those conditions, which you and Mr Martin have outlined are critical to the establishment and growth through that first five-year period, when they are vulnerable,



to maturity, are met? What resources do the planning authorities have to get that right?

Nicole Hillier: It is quite a well-known issue in the local planning authorities that resourcing is probably a strong factor in this for enforcement and monitoring of these sorts of schemes. A couple of years ago, DEFRA did some investigation into this. I think one fifth of LPAs do not have access to ecological expertise. Even if they are going out and seeing it, it is not necessarily that the local planning authorities have that expertise, due to resourcing issues, to be able to assess whether things are going well. It is partly just from them not being able to put somebody forward.

Q12 **Barry Gardiner:** It is interesting. I was with the Chartered Institute of Ecology and Environmental Management last night and it was saying that it was more than a fifth; they can access expertise, but in terms of the designated skills base within the organisation it is only a third. Of course, if you are pulling it in from the outside, it is not the same as actually having that culture in the organisation to understand it and do it organically, if I can use that expression.

How often are BNG commitments simply not delivering? At the beginning, to the Chair, you gave a fairly upbeat answer—"It is maybe taking time to bed in, but I am sure it will be all right in the end". Do you not think you were a wee bit optimistic?

Nicole Hillier: I suppose that I am trying to give the benefit of the doubt. It is a fairly new policy. From a Town and Country Planning Act point of view, it has been in play for only a year and four months. If planning applications have not got through the system yet, it will be time for the planting or the biodiversity enhancements to have embedded in, so that local planning authorities can perhaps see whether the impact has been made. It is giving developers the chance to embed these policies and do the net gain, while keeping an eye on them to make sure it is happening. That is perhaps the way I am approaching it at the moment.

Q13 **Barry Gardiner:** Mr Martin, is there anything you would like to add about the way in which this is being delivered?

Kevin Martin: It is going to be so difficult, because, especially with developments, we have this culture where we plant trees and do not think about their establishment. There is always funding to plant trees. There is never a shortage of funding to plant trees. Where the shortage comes, in finance, but also in resources, staff and knowledge, is in establishment. This establishment is something we need to work on. We need to steer away from just planting numbers of trees and work towards established trees.

When we look at tree establishment especially, we look at between five and seven years before a plant is established. Even with a lot of the research that we are doing, we know that these trees, which we are now starting to understand will have better ability to adapt to drought, still



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need support until they are established, because they need to establish root systems. The emphasis now needs to be on establishment of trees.

- Q14 **Barry Gardiner:** It has been said that BNG does not sufficiently incentivise the restoration or improvement of ancient woodland. The BNG is a transactional process and therefore may favour simple solutions, such as planting hundreds of saplings. Is that a fundamental flaw in BNG right at the beginning?

Nicole Hillier: With how BNG works, ancient woodlands and irreplaceable habitats are accounted for outside of the metrics. In theory, they should not be included within any calculations, as they are irreplaceable habitats, so you cannot account for them. When the policy first became something the Government were looking into, we pondered how we were going to approach ancient woodlands and irreplaceable habitats to make sure that they are not insufficiently accounted for in this process. The DEFRA metric accounts for ancient woodland by keeping it separate.

- Q15 **Barry Gardiner:** It does not facilitate the natural woodland regeneration, does it?

Nicole Hillier: Where there is any ancient woodland on site for a development, if there are compensatory measures—I would have to double check on the specifics of the legislation—I think you can provide enhancements for ancient woodland as part of your BNG, as long as you are not directly affecting the ancient woodland. You can provide enhancements to an ancient woodland to count towards your BNG metric. It depends on whether a developer is choosing to have that option, as opposed to just planting more trees and not tackling the ancient woodland.

- Q16 **Barry Gardiner:** My point was that, because of the transactional nature of it, they are less likely to go for that option.

Nicole Hillier: Possibly, yes.

- Q17 **Olivia Blake:** Mr Martin, we have already covered this, but I wanted to explore it a little more thoroughly. What policies could be encouraged to make sure that the right tree is planted in the right place, rather than just the largest number of trees or whips, for example, and that climate resilience is also involved in that policy?

Kevin Martin: It cannot be “one rule fits all”. When we are looking at policy especially, we definitely need to have a specific one for the urban environment, because how we deal with the urban environment is going to be completely different from where we are creating new woodlands. Especially when plans come in, with planting plans for urban developments, we really have to start to think about what trees are being selected and where they are placed.



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Where we are looking at, for instance, biodiversity net gain, if we do not think about our species selection for urban environments, people could be planting large, broad-spreading trees next to houses. At some point in that tree's life, it is going to get in conflict with that property, building or infrastructure. We need to start to think about that.

When we think about climate, there needs to be more emphasis on understanding the site conditions. Currently, we tend to see the same species composition or species mix planted everywhere. It needs to be really specific to that site. Guiding that by policy would be a big breakthrough in how we deal especially with green infrastructure moving forward.

Q18 Olivia Blake: Do you think that we need to educate the public about the fact that the trees that they are used to seeing might be replaced, or new trees that come into an area might be different, and the reasons why, so that people can understand that a bit better?

Kevin Martin: Yes. From the work that I do, that is probably one of the biggest tasks we have. We need a cultural change. I talk about this a lot when I give public engagement talks at Kew. We have got used to having a certain type of plant within our gardens and spaces. If we think about the plants that we see and all know and love, a lot of those are from the early Victorian era, from those plant collectors. They collected and selected plants for horticultural beauty and wonder. As we are getting warmer and going through these drought periods, we are seeing that those plants, because they put so much energy into growth and having showy flowers, do not have any hydraulic capacity to deal with drought.

We need to work on a public engagement piece to understand that we have to start shifting our mindsets culturally. For instance, I know lots of local authority tree officers. They are always under pressure to plant flowering cherries. Flowering cherries are probably one of the worst when it comes to drought tolerance. We need, first, to look at better-suited species of flowering cherry, but, secondly, to engage with the public to explain why we need to see this shift, especially in our urban environments and in the south-east of the UK.

Q19 Olivia Blake: That is really helpful. Just quickly, do you think that nurseries are prepared for the needs that climate will bring in terms of what they are currently cultivating?

Kevin Martin: This is the next big step. If we look at our current nursery stock, they do not often hold enough stock of some of the better-suited species. I have done a large amount of research in this area trying to understand how we can move forward. When I ask the nurseries whether they know the provenance of their plants, so the original where that seed came from, they cannot tell you. A lot of the plants that we have within the commercial nursery sector are clones, taken from cuttings and passed around the commercial sector, so we have very little diversity of genetic material of plants.



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We need to look at encouraging the commercial nurseries to start creating partnerships to get seed from better-suited environments, especially in our urban environments, so from these drier ecosystems. Georgia, Azerbaijan and Romania, for instance, are places we should be trying to create partnerships with to get that seed into the nurseries to produce those trees.

Q20 Olivia Blake: I could talk to you about this all day, but I will bring Ms Hillier in. Is there enough monitoring in the years following development to ensure planting is successful and remedied? That is the key thing for me. Should there be more focus on remedying, if there is not?

Nicole Hillier: I have done a bit of an analysis, for National Highways in particular, for the Committee, on how well it has been going after the schemes have been operational. I had a look into about 20 of its post-operational project evaluations to get a bit of an understanding of how well schemes are being monitored and how good maintenance is after the process of development has happened.

The results were a bit bleak, if I have to be honest. Only one project probably delivered good monitoring post-construction, in our professional opinion, and three provided a consistent regime. In this instance, with these schemes, we would recommend that, if they are being left for five years afterwards, perhaps National Highways needs to look at whether its contractors are suitably monitoring the schemes beforehand, making sure that things are happening, rectifying any issues and maintaining these trees in good order before getting to the point where National Highways is then doing its POPEs, as they are referred to, which highlight that there are issues. Then we have situations such as the A14, where I think three-quarters of the trees died.

We would recommend that there are really clear steps and a framework that developers, such as National Highways in this instance, but also others, could follow, which would set out at what point they need to provide monitoring data and to have evidence that they have been maintaining the trees and habitats to make sure that they are delivering what has been expected, that they are showing value for money and delivering what has been promised as part of their of their commitments, in terms of development consent or at local planning level.

Q21 Cameron Thomas: I have had the pleasure of joining some dedicated parishioners and councillors in planting community orchards over the last couple of years, and they are coming along really nicely. On the other hand, you have some large-scale high-profile examples of failed planting schemes, such as on the A14 between Cambridge and Huntingdon. What do you suppose might explain the difference between those schemes carried out by dedicated caretakers of their communities and those carried out by contractors? Would you suggest that preparation work might play a role?



Nicole Hillier: It comes back to a point I made earlier. It depends on what the level of expertise is of those who are planting the trees, so whether contractors have that ecological and arboricultural knowledge to be able to plant trees and make sure they thrive. Again, if they are not maintaining or monitoring them in a reasonable amount of time, they might not be picking up on those issues. From a local community perspective, they possibly will see them more, being local to the area, so there is possibly an element that they are being monitored by the local community as well.

Making sure that monitoring and maintenance schemes are effective, are more robust and stand up a bit more to scrutiny from that perspective is key here. As it stands, it does not seem that trees are getting quite as much attention perhaps as they could do. That is not even considering the impacts of climate change and how that will make them even more stressed, as Mr Martin was mentioning beforehand.

Kevin Martin: It is down to multiple factors. We have to really understand what the site conditions were, but also what species were selected. For instance, if they are on a roadside they are going to be in full sun. For those trees, you are going to be looking at your real stress tolerators and your trees that can deal with drought.

It is down to the skillset of the contractors dealing with the establishment. From what I read it is a failed establishment, so the watering probably was not where it needed to be. That, combined with poor species selection, is why the mortality rate is so high in this instance. That is where we need to start to build our knowledge and get the right expertise in these areas to make sure that these planting plans become established.

Q22 **Cameron Thomas:** For future large-scale developments, such as highways, how can planning officers and Ministers ensure that mitigation and biodiversity net gain plans are actually feasible?

Nicole Hillier: As mentioned previously, I would suggest having quite a clear framework, so that the data will then be visible and transparent for Ministers to be able to assess National Highways against. If there were clear milestones and goals when this sort of information needs to be provided by, that would incentivise National Highways to keep tabs on any contractors it has provided this information to, and give them the opportunity to show that monitoring is in place and they are establishing at a rate that would be expected. They could also then tick off any other biological enhancements—for example, there was an otter bridge that was not included—and show that these enhancements were in place, and demonstrate that value for money to the public purse had been delivered there.

Kevin Martin: It would be good if they could invest in an expert to make sure the species selection is right for that site. That would be a really big help. What is the establishment plan? For tree establishment, you would



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be looking for irrigating, checking the tubes—because sometimes the tubes can overheat the plant—and making sure the soil conditions are right and the soil is not compacted.

It is making sure that there is essentially a tick system that they can be monitored against over a seven to 10-year period to prove that these maintenance checks have been carried out and record what the losses and establishment rates are. You will always lose some young trees—I do, even at Kew—but it should not be as vast as that. There should be a very clear recording process on what they lose and what the maintenance plan is, and then having oversight by an expert if those plans need to be adjusted to increase establishment rates.

Chair: Thank you very much for that. I am afraid that I am going to have to bring this session temporarily to a close. Those watching our proceedings might not be aware that the Division bells have just gone. Members will have to leave now and vote briefly, and will then return and carry on with this panel. With that, this sitting is suspended.

Sitting suspended for a Division in the House.

On resuming—

Chair: Welcome back, everyone, to this important session. We were just hearing from Nicole Hillier and Kevin Martin before we broke for the division.

Q23 **Martin Rhodes:** Mr Martin, you mentioned London in particular and issues of water stress factors and so on for climate change. More generally, are there particular challenges around urban areas or big infrastructure, such as road-building projects?

Kevin Martin: We are going to see a lot more pressure on the plants and trees, especially around big infrastructure, because we have to remember that you will plant alongside roads. We have to realise what happens with the road surface. It absorbs heat all day and radiates at night. Therefore, as a microclimate, it pushes those temperatures up and the stresses for plants are exaggerated. We have to understand that.

That is also if the soil is compacted or we start to see large areas of grass death, such as this summer, when the grass goes brown. When that grass goes brown, that increases our soil temperatures really fast, because that soil becomes baked. It then takes on similar properties as concrete: it will absorb heat and radiate at night. That is why it is really critical that we understand this when we are looking at what trees we select to make sure those trees that we are selecting can deal with these extra stresses.

Q24 **Martin Rhodes:** You mentioned earlier choosing particular species and so on, but what about aftercare? Once they are planted, what is required in terms of tree planning in these sorts of places?



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Kevin Martin: I spoke earlier about that establishment stage. For those first five to seven years, it is making sure that they are watered regularly, just so they can establish their root systems. Once those root systems are established, that plant can then start to look after itself, especially if we can select better-suited species, or not just species, but plants that are selected from better-suited environments, so the seed sources come from these semi-arid ecosystems. Once they are established, they will have the ability to deal with these stresses through their functional traits. That is what is critical. It is a combination now of understanding both tree selection for a site, and the establishment. Once they are established, hopefully, we should start to see better returns.

Q25 **Martin Rhodes:** You said just before the break that, with regards to planting trees, there are always some failures. That is always the case. If you are planting in the right conditions, what is the normal failure rate?

Kevin Martin: I would expect to see no more than 20%, realistically, if you are doing a really good establishment. I would not expect to see more than that.

Q26 **Chair:** You have raised some important points here around the skills that are needed to ensure the success of the biodiversity net gain policy. This is a policy. We are talking particularly about the Highways Agency—a major organisation, but an organisation whose primary function is around roads. This is also a policy that is responded to by house builders, including not only major house builders, but very small house builders, maybe just building a few units. This is adding a huge new area of responsibility that previously they would not have had. I wonder whether that is something that enough thought has been given to.

In terms of the skills required to ensure the success of these developments, do you think that Government have given enough thought to ensuring that organisations that might be entirely well meaning do not see failures of these schemes, which undermine public confidence in biodiversity net gain, and mean we do not actually get the nature of development that we need? Mr Martin, do you think that, as part of our recommendations, we should be saying something more on biodiversity net gain around ensuring those skills are in place, even among relatively small organisations that have these responsibilities?

Kevin Martin: Yes. That is probably one of our biggest problems. If we look at horticulture as an industry, we are getting very little uptake now. We are getting to a critical point where we have a big skills gap, and that is a real concern. We are seeing a lot fewer young people go into this career. It is also about the support for higher education. From when I trained in 2000 to what we see now in colleges, it is completely different. The funding is not there and the colleges are really struggling to support the learning of young people to move into this industry.

Also, we need to influence the next generation. That is where we need to gather pace, especially for things such as biodiversity net gain, but also



looking at using green infrastructure to deal with urban heat islands and nature-based solutions. This is a sector where we really need some help in building those skills.

Q27 **Chair:** Nicole Hillier, from your perspective, if you were advising developers, Government agencies or anyone else, what sort of advice would you give them on how they make sure that they are not going to spend a lot of money doing something that ultimately fails?

Nicole Hillier: It is really considering the trees that they are planting as critical infrastructure as part of the road schemes themselves—so, when they are developing schemes, embedding the use of trees as a nature-based solution from a really early stage in the process. Trees can provide a lot of benefits to the road scheme itself by holding water off the side of the road and things like that. They can really be of value, if they are established well, and bring benefits to the road maintenance itself. It is things such as reducing the moisture on the road by taking that moisture up, or potentially reducing aquaplaning, if that water can run off. It also produces the ability to form a natural highway along the side that could also contribute to the wider commitments around biodiversity.

It is about not necessarily seeing trees as something that has to be planted alongside for mitigation purposes, but seeing the value of them that they bring to the highways. They provide screening or noise abatement. There are a lot of benefits. Having well-established and well-cared-for trees could provide returns from ecosystem services that trees generally provide. I would embed that thought that bringing trees into the development in an early stage can benefit National Highways and other developers by providing some services for free, which I am sure everybody would love to have.

Chair: Thank you very much, Nicole Hillier and Kevin Martin, for your evidence today. We are very grateful and we will bring this first panel to a close. Thank you very much.