House of Commons

Environmental Audit Committee

Oral evidence: Greening the post-Covid Recovery, HC 347

Thursday 23 July 2020

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Watch the meeting

Members present: Philip Dunne (Chair); Feryal Clark; Barry Gardiner; Mr Robert Goodwill; Marco Longhi; Caroline Lucas; John Mc Nally; Dr Matthew Offord; Alex Sobel; Claudia Webbe, Nadia Whittome.

Questions 1-61

Witnesses

I: Caterina Brandmayr, Senior Policy Analyst, Green Alliance; Dimitri Zenghelis, Grantham Research Institute at LSE; Dr Richard Benwell, CEO, Wildlife and Countryside Link.

II: Tom Thackray, Infrastructure and energy policy lead, CBI; Sue Ferns, General Council lead on energy and climate change, TUC; Melanie Leech, Chief Executive, British Property Federation.

Examination of witnesses

Witnesses: Caterina Brandmayr, Richard Benwell and Dimitri Zenghelis.

Q1 **Chair:** Welcome to the Environmental Audit Committee. This is the first hearing in our short inquiry into greening the post-covid recovery. We have two panels today. I am pleased to welcome our first set of witnesses: Caterina Brandmayr, Dimitri Zenghelis and Dr Richard Benwell. Please introduce yourselves, starting with Caterina.

Caterina Brandmayr: Good morning. I am Caterina Brandmayr, senior policy analyst at Green Alliance, an independent think-tank and charity focused on achieving ambitious leadership for the environment.

Dimitri Zenghelis: Good morning, everyone. I am Dimitri Zenghelis. I represent the Grantham Research Institute at the London School of Economics and the Bennett Institute at the University of Cambridge. Both institutes look at the economics of sustainable growth. My background is as a macroeconomist and I spent 10 years at the Treasury. My focus is very much on things like productivity, competitiveness, jobs and recovery. That has been the focus of my work, certainly over the post-covid period.

Richard Benwell: Good morning. My name is Richard Benwell. I am from Wildlife and Countryside Link. We are a coalition of 57 organisations working to improve animal welfare, to improve people's access to nature and to protect our natural environment.

Q2 **Chair:** Thank you all very much. I am going to start with a couple of general questions for each of you to set some context. Clearly, the covid pandemic is the most significant global event in a hundred years in terms of its impact on human health, the environment and the economy. As we move out of the pandemic, Governments are committing trillions of pounds sterling or dollars to economic measures to stimulate recovery and prevent economic collapse. Starting with Caterina, could you give us your perspective on what a green recovery should look like for the UK?

Caterina Brandmayr: The coronavirus crisis has been a wake-up call, raising questions as to how we can live alongside nature and what we want the UK's economy and communities to look like in the future. As the UK emerges from the crisis, the country is at a crossroads. The decisions taken now are likely to dictate the trajectory for decades to come. Crucially, various polls show that the majority of people across the UK do not want to go back to normality exactly as it was before the pandemic. Therefore, we call for the Government to take this opportunity for a new start and to rebuild our economy in a way that ties in climate and environmental considerations, as well as improved equity and quality of life.

We think the recovery should be based on five building blocks: investment in net zero infrastructure, restoring high-quality natural systems, using resources better across the economy, ensuring clean air and healthy places, and making the recovery fair by promoting high-quality employment across the UK. A recovery based on these five pillars will benefit people, nature and business across the country, supporting green jobs and promoting a transition to a more resilient, prosperous UK.

Now is the time to mainstream the environmental agenda. With so many people calling for a green recovery, it is time for the Government to understand a zero-carbon, nature-friendly recovery is also the best economics to get us out of the crisis. To make this a reality, the Government should adopt an ambitious cross-economy plan that includes investment in climate and nature solutions, as well as policy and regulations to promote the transition towards a net zero, nature-rich future.

Crucially, embedding environmental priorities in the recovery should not be the task of a single Department. They should be inside a cross-Government priority, led by the Prime Minister's office. That is because a green recovery will require the Government's entire plan to be compatible with the environmental and climate cause, to avoid locking-in investment in jobs and industries that contribute to environmental degradation.

Furthermore, it is vital that action to promote recovery does not only focus on short-term invention but instead is part of a long-term conviction to build a more resilient, competitive net zero economy.

Finally, it is vital for the UK to set out an ambitious plan at home, in order to be able to showcase its climate leadership and raise international ambition for a green recovery during its presidency of the G7 and at the climate conference next year.

Q3 **Chair:** Thank you, Caterina. Dimitri, could you give us your perspective, perhaps with your angle as an economist?

Dimitri Zenghelis: The challenge at the moment, certainly once lockdown is fully eased, is to generate restored demand, in the short run, and supply, in the longer term. That is going to require a mix of polices and investments, but also institutional reform. Hopefully I will touch on that in a moment.

The important thing to recognise is that this really isn't about throwing public money into everything. It is about galvanising private sector investment. People have been apt to invoke FDR, talking about confidence and expectations, and I think that is right. Avoiding having the economy in this country, and elsewhere, lapsing into protected depression, and making progress on some of our climate and environmental goals, requires framing a compelling vision of the benefit of these actions, so that you can manage expectations. Credibility and managing expectations are key. In the short run, we have got what is called a classic paradox of thrift. That happens when fear of a downturn leads businesses to cut investment, to shed labour; banks to retrench credit; consumers to stop spending. Of course, if everybody behaves in the same way simultaneously, those expectations of a downturn become self-fulfilling; so the primary macroeconomic task for policy makers is to try and offset this and stimulate private spending and lending, and hiring and activity, in the short run.

We also have a challenge in the long run, where the objective here is to stimulate investment in assets that crowd in activity, that improve productivity, that provide resilient, durable jobs, fit for a resource and carbon-constrained 21st century. It turns out that a lot of the sustainable, resilient investments have very appealing features in the short and the long run. In the short run, things like insulation retrofits, building wind turbines, broadband networks, planting trees, restoring wetland—you name it: a whole gamut of environmental policies and low-carbon policies are actually very labour-intensive. They are not susceptible to imports or offshoring and they have what are called high short-run multipliers. That is they generate significant growth for each pound of investment.

It also turns out that in the long run these multipliers are actually high as well, as the operation and maintenance of things like more productive renewable technologies makes them actually less labour-intensive—in other words more productive—with lots of the energy costs being passed on to the wider economy. It also induces enormous innovation in terms of what we call economies of scale and discovery and innovation, which bring down costs precipitously in some of these new technologies, but also provide, interestingly—and there is a lot of evidence for this—significantly greater spillovers into other parts of the economy: investing and innovation in sustainable fossil fuel sectors.

How big are these multipliers? Actually, it turns out—and we have written a paper with colleagues Cameron Hepburn, Brian O'Callaghan, Joe Stiglitz and Nick Stern at Oxford university to show—that actually they are surprisingly big. Every pound of spending and borrowing spent during a severe downturn can raise output by £2 or £3 and, indeed, there is some evidence that that could be higher.

What does it mean in terms of the right policy mix? As I have said already, it is a mix of policies and institutional reform. It is not just the investment. It is about things like developing a national investment bank, building on the Cities and Local Government Devolution Act 2016 to allow policy autonomy to the regions and devolution to cities. It is about spreading and sharing risk by Government but it is also about providing clarity on things like a rising carbon price trajectory, use of standards and regulations, and targeted use of public procurement as well, to support the clean R&D, but I am sure we will touch on these in detail in a moment.

Q4 **Chair:** I think we will. If you have done a report on the multiplier it would be very helpful if you could drop us a note to give us that statistic, particularly compared with other kinds of spending.

Dimitri Zenghelis: Absolutely.

Q5 **Chair:** Richard, could you give us your perspective as well?

Richard Benwell: I guess my first recommendation to the Committee might be to think about renaming its inquiry, because to me the phrase "green recovery" is a tautology. If it is not a green recovery, then it is not really an economic recovery at all. It is a hair of the dog; it is a short-term pick-me-up, right back on the path to causing the same sorts of problems all over again, because if there is anything that this crisis has taught us it is that ecology and economy are utterly intertwined. We are in the midst of a global economic downturn. The global economy has been brought to its knees by an ecological problem that has been caused by the way that we interact with nature.

The World Economic Forum, as you might have seen, has identified that the top five risks to the global economy now are all environmental risks and that over half of global GDP is exposed to environmental risk. So it might feel like some of the big ecological risks are a long way away. What this crisis has taught us is that the global economy is really interdependent and some risks may be really localised—some of the other environmental risks that face us if we take the same path again: think of flood risk if we keep on degrading our wetlands; think of risks to our farming businesses if we keep over-exploiting our soils; think of risks to crop yields if we let pollinators continue to decline. Others are regional in scale. Think, there, of things like air pollution, where pollution in one country might affect the quality of the air we breathe in a city in another country; but others are global, and these are the ones that we are most familiar with—things like the long-term decline of wildlife and climate change.

The point here is that if it is not a green recovery, it is not a recovery at all; it is continuing on the same path to long-term economic weakness that we have experienced so far.

What does a real recovery look like? In economic terms, as Dimitri said, we need to be thinking about short-term demand side measures that stimulate investment in the economy. There we should be looking for injections of investment in natural infrastructure—in the green assets that sustain our economy and that will make us more resilient to future environmental risks. In the long term, it means setting a regulatory framework that makes the polluter pay and that pays the provider of environmental goods, so that you build that environmental resilience into your economic system.

What does it look like in physical terms? This is where it gets exciting, I guess. In physical terms, it means pocket parks and tiny forests in our cities. It means greener streets and targeting the areas where deprivation overlaps with nature deprivation, to restore people's quality of life in our inner cities. It means re-wetting our uplands and sometimes destocking to reduce our impact, but also investing in our peatlands and upland habitats to reduce flood risk and to sequester carbon.

In the lowlands, it means turning around some of the problems caused by CAP by putting trees and ponds back into our farm systems to help support pollinators. Around our cities, it means a greener belt—one that actually protects green spaces and wildlife at the same time. On our coastlands, it means things like intertidal habitat, salt marsh creation and restoring our seas to replenish the economic stocks of our fisheries and marine wildlife. That is my vision for a green recovery, and I look forward to talking about how to get there.

Q6 **Chair:** Thank you, Richard. Many of the measures that you are talking about are not short-term measures; these are longer-term changes, many of which are covered in plans that the Government has for its environment plan. I am particularly interested in what the immediate measures that the Government has already announced, and that it is planning to announce in the upcoming comprehensive spending review this autumn, can do to alter the recovery curve to ensure that the economic impact is manageable for the economy and unemployment level, and that it does not reach the worst of the OBR scenarios. Most of those are to do with shorter-term measures. Can you each give us your impressions of the performance of the Government so far and the measures that they have announced? Do you think they are on the right lines, and what would you like to see coming out of the spending review this autumn?

Caterina Brandmayr: I will start by emphasising the fact that progress towards a green recovery should be across the comprehensive set of interventions by Government. The green agenda cannot be siloed into specific interventions; it should be embedded across the entire recovery. Although there have been some positive signs from Government—for example, the announcement of £3 billion funding for energy efficiency in buildings, which was referred to in the Chancellor's summer statement and will include climate change conditions for business support and early support for walking and cycling—our assessment is that the Government's plans so far are not sufficient to promote a green recovery.

There are three key shortfalls that I will outline. First, we think the Government is still underinvesting in climate and nature solutions. Green Alliance, together with a number of organisations, has estimated that the additional investment needed over the next few years is £25 billion per year. This is across sectors including buildings, transport, industry and nature. Although the funding announced by the Government since the start of 2020 will support some of the key areas identified, it provides only a fraction of the investment needed over the next few years. This investment gap is what we want the Government to address in the comprehensive spending review.

The second point is that climate and nature considerations are not yet embedded across the whole range of Government interventions. For example, environmental considerations seem to have been overlooked under the Government's Project Speed initiative, the fact that proposed changes to planning regulations are likely to lead to further environmental damage and the confirmation in the Budget earlier this year that the Government still plan to invest, for example, in new roads. We think the Government should instead be applying a net zero test across all spending and investment decisions, to make sure that investments are compatible with a net zero future and to help us reach our environmental goals.

Finally, the third shortfall is the fact that we are still awaiting the publication of key strategies, including, for example, the national infrastructure strategy, which has been repeatedly delayed, the energy White Paper, the low carbon heat strategy and the transportation plan. All of these strategies are fundamental to promote business investment and to create the long-term low carbon market. Their absence is therefore undermining business investment in the right type of solutions that will help address the climate and nature crisis.

If the Government are serious, those are the three shortfalls they should be addressing as part of the recovery, and we will be monitoring the whole suite of interventions to make sure that the announcements collectively match up with what is needed for a green recovery.

Q7 **Chair:** So there is a golden opportunity with the spending review to get many of these strategies out in a coherent way. I agree with you that we need those to be presented as a package.

Dimitri, you called earlier for a national investment bank. The Government have used the British Business Bank to inject billions of pounds into keeping British companies solvent during this crisis. Is it doing enough?

Dimitri Zenghelis: The Government have made a welcome good start. Clearly, some of the investments we have seen, in particular the £3 billion to be spent in the next year or so improving energy efficiency in public buildings and UK homes, are very welcome, but what we need is a strategy beyond the next nine months and beyond the next year to galvanise private investors in those sectors of the economy that are going to be most productive.

Caterina and Richard are both right. There is only one 21st century growth story and that is a sustainable growth story. Countries that invest in the alternative are going to find themselves uncompetitive and the alternative will snuff itself out eventually. So that means we need a clear and coherent strategy to invest in these sectors and secure enduring jobs into the future. That means working with some of the new technological innovations: connectivity, smart connectivity, broadband and demand management, accessible EV charging—the Government have made a good start on that and it needs to go further—upgrading and retrofitting homes and buildings—again, a good start, but we need a strategy to go further—heat networks, public transport. It is the usual gamut of stuff, as well as all the natural environmental improvements that Richard spoke about.

Like I said before, it is really important that these policies and investments are backed up by specific strategic institutional reforms. I talked a little bit about devolution and policy autonomy to cities and regions, building on the Cities and Local Government Devolution Act 2016. These entities are often much better place to address local infrastructure and skills challenges and to also help with levelling up in some of the more undermined regions.

The importance of a national investment bank that covers all infrastructure and public sector-related investment is that we are talking here—let's be clear—about sectors such as energy and transport and buildings and planning, which are probably the most policy-driven and highly regulated sectors in the economy, and there is a reason for that. They tend to be prone to networks, they have large barriers and start-up costs to overcome, so they require a degree of public sector investment or skin in the game. So it is really important that an institution such as a national investment bank can actually manage and reduce risk in a cost-effective way, and that leverages substantial sums at orders of magnitude and higher investment than the public sector actually puts in. If you like, it is a magical tool that can give you a very strong bang for your buck. There is a lot of evidence that we have produced on how a little bit of public paid-up capital can deliver a heck of a lot of private investment.

Again, this bears repeating: this is all about the Government providing a clear and credible signal. Then to complement that we need the policies. We need the policies on a clear carbon price, with a trajectory into the medium term. We need standards and regulations where pricing is shown not to be very effective. We need support for clean R&D and, indeed, deployment support as well. We need to target public procurement. The Government are responsible for up to a third of spending in the economy. It is important that it sets an example in driving new markets.

So it's this mix of institutions, policies and specific investments that I think can leverage a transition.

You reach a tipping point where the private sector just takes over, because it is clear that this country's competitive future then becomes a low-carbon one and the private sector can go ahead and make this country a world leader in what will be one of the fastest growing markets—if not the fastest growing market—in the world.

Q8 **Chair:** Thank you, Dimitri. Richard, you called for a national nature service; I am sure that was your idea. When the Committee looked into invasive species last year, we called for a national volunteer service to encourage all the nature lovers to look for invasive species around the country. I think we are on very similar lines there, but you are talking about jobs, whereas we are talking about volunteering. How do you think the Government is doing in the measures announced thus far?

Richard Benwell: Nowhere near well enough. We obviously appreciate the £40 million announced by the Prime Minister to support investment in nature, but that is an order of magnitude below what is needed.

I want to go back to the comment you made before, Chair, about how I was talking about long-term vision. You are absolutely right that to come to maturity, broadly, forest takes a while. Wetlands take a little less long, but they take a while, too. But the investment decisions that we make now will lead to that long-term vision. Of course, it is the investment decisions that we take now that constitute the demand-side response to the short-term economic crisis.

So what can Government do to stimulate the kind of demand in the economy that Dimitri talked about? It can encourage people to go out and get two-for-one meals Monday to Wednesday, and kick-start the consumer economy and spend, spend, spend, build, build, build, or it can invest in assets and infrastructure—and green infrastructure is just as good a choice for getting money flowing around the economy as grey infrastructure. It is those short-term decisions that we make now that will lead to that long-term vision, whether it is one of more roads and more dirty infrastructure, or more along the lines that I described earlier.

How much money does it take? Well, £40 million barely scratches the surface of the losses that the environmental sector has suffered during coronavirus. I don't mention that to think about charity jobs, although it is obviously important that that sector employs between 15,000 and 20,000 people; I mention it because the environmental NGOs are a key delivery partner in all of Government's environmental aspirations.

If you think of every tree planting project over the last few years, the Woodland Trust, the National Trust or the RSPB will have been involved. If you think of our river restoration projects, 96% of catchment partnerships are co-led or led by ENGOs. If you think about delivery of habitat improvement, most of the Environment Agency's environmental programme is co-led by ENGOs, who bring in most of the cash.

As Dimitri was saying, Government provides a seed and NGOs and philanthropic or private sector givers multiply that up. In the Environment Agency's investment programme, a third is provided by the EA, a third is provided by NGOs and a third is provided by private or philanthropic giving, attracted by NGOs.

The amount of money that Government has put into green recovery so far not only does not get us back to where we were in delivery terms before the coronavirus crisis; it goes nowhere near the kind of investment that we would need to start replenishing the long-term decline in the environmental infrastructure needed to create a resilient economy. For that, we think you need to be talking more in the region of £400 million to £800 million per year, just to get to the current targets in the 25-year environment plan. To do something really ambitious that looks like a truly green recovery, you need an order of magnitude again.

I have talked for a long time, so, to specifically address your point about the national nature service, Dimitri mentioned FDR, the inspiration for the Civilian Conservation Corps that sent 300,000 people off to plant trees in the States in the 1930s, but there are examples in the UK, too. The Manpower Services Commission, in the '80s, provided paid employment and training opportunities for thousands of people. That multiplied up the conservation sector to do some really amazing things, and lots of the top people in our nature worlds now were employed in the Manpower Services Commission.

We think that the environment sector could absorb another 10,000 or 20,000 jobs for between £400 million and £800 million pounds a year and employ a much more diverse range of people, who would never have thought about joining the environment sector, in jobs that will leave them healthier and our country greener. I would love to talk more about that—we think there is a huge opportunity if the Government go for it.

Chair: Thank you, Richard. That is a very good lead-in to Alex, who is going to talk about jobs.

Q9 **Alex Sobel:** Yes, that segues nicely. It is nice to see you again, Richard—you are becoming a fairly regular witness on our Committee and always give such great evidence. You mentioned the National Trust, to which I spoke not long ago. It has had to pause a lot of its projects because it is reliant on visitor income at its houses, and that has all gone. It is having to prioritise that part of their organisation and it is having a knock-on effect—like all the other organisations that have no visitor income.

We have a situation where there is a lack of income for certain parts of the sector and an inability to do projects, when lots of projects need to happen. We also have the Government's levelling-up agenda and an issue around a lack of BAME jobs in nature. Your organisation has put together a list of shovel-ready nature projects. How could those projects help with the levelling-up agenda, with getting BAME people into jobs, and with helping to kick-start some of those other organisations that have had to pause their nature projects? How could the Government fund and support those projects to get them going?

Richard Benwell: You recognise two really important problems. First, you are right: the sector is really struggling on delivery. The National Trust is losing £200 million this year and probably will again next year. We think that during lockdown, the sector as a whole lost about £35 million a month. Some of that was helped by furlough, but it did not go the whole way to cover it.

It is important to emphasise that charities of all business models are losing money now, not just the ones that depend on footfall. We have seen a big drop-off in membership recruitment and retention. We have seen multimillion pound losses on projects where money had already been invested—things such as the RSPB's project to combat invasives on Gough island, where it had spent millions of pounds preparing to send boats from South Africa to Gough to do conservation work—that money is now lost. There is a huge shortfall.

That £315 million was a suggestion for an immediate boost on projects that could see shovels in the ground between three and six months. To go back to that earlier point, this is about a short-term boost; there is nothing more shovel-ready than a tree—it is really short-term stuff.

The second problem that you identified is about diversity. You are right: it is a twofold problem. Our sector is actually woefully behind in terms of diversity; we really struggle behind other professional sectors in terms of our ethnic mix—that is a big challenge to address. People's access to nature is really a problem, too. Areas that have more than 40% BAME communities are 11 times less likely to have access to a quality natural environment—that is serious stuff.

What can we do about it? Well, lots of the projects that we have suggested focus on inner-city interventions to improve the quality of people's green spaces so that they are not just unappealing litter-filled patches of grass; they become enjoyable places for people to experience and go out and exercise in, which of course, has huge wellbeing and physical health benefits.

We are also suggesting, with things like the national nature service, that by providing paid employment and training opportunities, you provide a sort of pipeline or funnel for people to get into a sector that has so often depended on people being able to afford to volunteer to get involved, which is absolutely wrong. We want to open up access to nature and to being involved in the nature sector in a way that is much fairer and more equitable.

The shovel-ready projects are a foundation for immediate investment—£300 million right now. You would probably need to double or triple that each year to restore nature. The national nature service is a way to expand employment opportunities on top of that.

The third layer on the cake is the really ambitious stuff. You might have seen the National Trust's £5.5 billion proposal for greening cities. That could be done really quickly by investing in street trees or in the infrastructure to make parks more accessible. The National Trust reckons that you could provide £200 billion of health benefits for that £5.5 billion of investment, as well as 40,000 jobs and 6,000 permanent jobs. The scale of opportunity here is limited only by the scale of the Government's ambition.

Q10 **Alex Sobel:** Thank you, Richard. I am going to move on now to talk about a just transition. We have been talking about a just transition for 10 years—ensuring that high-emitting, fossil fuel-based jobs will be transitioned into low-carbon green jobs—and that has been accelerated now. For instance, British Airways is talking about cutting 12,000 high-carbon jobs from its staff.

Without covid, we would have seen the decommissioning of coal-fired power stations and high-carbon-intensive jobs anyway. How can the Government and the private sector work together to ensure that covid and a just transition segue together, and that we create these new jobs and ensure that there are jobs for people who are losing their jobs hand over fist in high-carbon areas? Caterina, does the Green Alliance have a perspective on that?

Caterina Brandmayr: Yes, sure. First of all, I will start by setting out that a just transition refers to a fair and equitable transition to a net zero, nature-friendly economy. When considering how the recovery could be designed to ensure a just transition, it is worth highlighting that, as Dimitri set out, there is a lot of employment potential in the industries that deliver for nature and climate.

To give you a sense of the scale, low-carbon electricity and heating, energy efficiency in buildings and electric vehicles could support nearly 700,000 jobs across England by 2030. Promoting a circular economy could also support over 100,000 net new jobs by 2030.

There is a lot of employment potential there, and that employment would be distributed across the country, thereby benefiting different areas outside London and the south-east. It would also support employment across a range of skills levels, which is important in order to be able to absorb different segments of the economy. Furthermore, it would support businesses by promoting, for example, energy efficiency in manufacturing, which would help to raise productivity. Again, that would benefit areas of the country where manufacturing accounts for a big share of the local economy.

Raising the productivity of that sector would contribute to improving local economies, and it would also benefit business—in terms of greater resilience and competitiveness—by supporting investment in solutions that will be in high demand in the future. That would be a way of ensuring that investment in nature and climate is actually an investment toward resilient jobs for the future.

On the other hand, there is a risk of locking in jobs in high-carbon industries by unconditionally supporting those industries. Those jobs will not be resilient, and we may miss the opportunity to support low-carbon industries. For example, there is evidence that shows that failure to attract EV battery gigafactories could cost the UK over 100,000 jobs by 2040, so there is a huge risk if we do not enable such industries and incentivise them to transition towards low-carbon alternatives.

The other point I would make about the opportunity that comes with supporting solutions for climate and nature is that, beyond benefiting jobs and industry, they will also deliver for people and communities across the country. As Richard Benwell mentioned earlier, there is a wealth of benefits that comes from these solutions, including cleaner air, greater access to nature, more liveable communities and warm, comfortable homes. It is true that, at the moment, access to those benefits is not equally distributed across the country, so making sure that access is instead more evenly distributed will be fundamental as part of the transition.

For the Government to embed and support the just transition, we would recommend first scaling up investment in solutions for climate and nature. As I mentioned in my response earlier, at the moment there is a gap in investment in a lot of the sectors that could create clean jobs. We should also avoid locking employment in by unconditionally supporting environmentally damaging industries. We need to set conditions for business support and make sure that those industries put in place strategies and take action to transition towards cleaner alternatives.

The second point is that the Government should also put in place reskilling and upskilling programmes, to make sure that there is a workforce that can support growth in those low-carbon industries, and that that workforce is able to deliver low-carbon and natural functions at a high standard, so that they do not lead to a loss in confidence as those solutions are rolled out. In terms of the type of skilling, the requirements will depend on the different parts of the country and the composition of local economies, so I recommend that those programmes are regionally tailored.

The third point is that Government should also ensure that there is equitable access to low-carbon, nature-friendly solutions—for example, by providing targeted support to low-income families, and making sure that every part of the country and every income group and part of society can access and benefit from the transition to a net zero, nature-rich society and economy.

The final point is that we recommend that Government engage community in designing the recovery plans by setting up recovery-focused citizens' assemblies and working with local communities, so that they can deliver more locally appropriate solutions for the recovery.

Q11 **Alex Sobel:** That is a lovely idea. I have heard about most of these things before, but that is a new one for me. Dimitri, do you have anything to add, particularly on the idea of conditionality—the French have given conditionality in some of their bail-out funding—and incentives for investment?

Dimitri Zenghelis: Absolutely. I just want to add something on the jobs question and the just transition question, if I may. The firms that are going to be productive and efficient in the 21st century are the ones that are competitive and provide durable, well-paid jobs—and those are going to be low-carbon and resource-efficient; they are not going to be the old industries of the 21st century.

We need flexible labour markets that enable workers to profit and thrive from this new economy. That, of course, means investing in the skills and jobs necessary for that new economy, and retooling and reskilling workers, but also, crucially, enabling those affected by changes to participate in the new economy, because there will be losers. Inevitably, there will be dislocation—there always is when you have change—and you cannot protect the jobs of the previous century for very long. A just transition means enabling and ensuring workers and providing a degree of social insurance for those who are affected, as well as retraining and repurposing skills and so on. The skills story is hugely important and also fits in nicely with the Government's levelling-up agenda.

Conditionality is clearly very important, especially when we are talking about things like bail-outs. They need to be conditional on improvements against climate-positive criteria, including the need to embrace new technologies and meet new efficiency standards. That should be a key part of the Government's agenda when it comes to dishing out substantial sums of public money.

Private firms should also be held to commit to mandatory disclosure and stress-testing of the kind recommended by the Task Force on Climate-related Financial Disclosures, and perhaps even to collaborate in some of the global research and development partnership in education, shipping and so on. The evidence suggests that attaching these kinds of standards—efficiency and emissions targets—to financial support can give a competitive edge in a rapidly changing marketplace. These are not things that are going to be burdensome or costly, either to the private sector or in terms of delivering returns for public money. The best way to protect jobs is to invest in new sectors and not to try to prop up inefficient, high-carbon companies that do not have a viable future.

You mentioned airlines. We have seen that in France, with the recent Air France-KLM Group bail-out, as well as with Austrian Airlines. That is starting to happen. I think it is really important that airlines are given intermediate targets at five or 10-year intervals. For example, it could start with offset. You then move to lighter planes, and eventually we are talking about hybrid and electric planes. You are not going to start straight away with that, but we are seeing that already in short-haul, and we will see that eventually in long-haul, with a mix of biofuels and so on.

You can very quickly start to decarbonise something like aviation, which is a really tough nut to crack. Don't forget, 10 or 20 years ago we said that electric vehicles were going to be eye-wateringly expensive and impossible. We said that about solar PV. We were proved wrong. When you put people's minds and entrepreneurial spirit and innovators to a task with a clear policy signal, it is amazing what they can deliver, and I think bail-out conditionality is a very important way of doing that. One of our proposals is that if airlines do not meet the targets, bail-out funding will be converted to equity at today's very low stock market prices for those airlines, thus providing a better deal for taxpayers and a stronger incentive for aviation companies.

Q12 **Alex Sobel:** That is helpful and a bit more positive on aviation than I have heard elsewhere. That is useful.

I am just going to finish with a question to Caterina. The Green Alliance has put out its "Blueprint for a resilient economy", where you have said that the Government have underinvested in the low carbon infrastructure that we need to reach net zero. Obviously, the Prime Minister has said that we need to build, build, build. Would you say that we need to build, build, build low-carbon infrastructure, and if we do, how would that help in terms of creating these new jobs? What potential would that give us for a recovery?

Caterina Brandmayr: You have rightly identified that there is a need to build low carbon infrastructure and deliver an infrastructure for nature and climate. That is because infrastructure will obviously form the underlying building blocks of the economy, and decisions taken now will dictate the trajectory for decades to come and will therefore influence whether we can meet our environmental commitments.

As Dimitri emphasised earlier, investment in infrastructure will also have benefits in terms of economic stimulus, because it can create jobs and have long-term multipliers. But at the moment, the Government have underinvested in the type of infrastructure that is needed for climate and nature.

We think there is priority for investment across a number of sectors, and I will give a few examples. In buildings, the announcement of the investment in housing energy efficiency for this year is a very welcome start, but that should just be the starting point. If we want to deliver that type of infrastructure, it has to be part of a year-on-year investment of a similar scale, plus policy and regulation to make sure that we really drive upgrades of our buildings across the entire building stock.

Also in the realm of building energy efficiency, we think the Government should be scaling up investment for innovative solutions that enable buildings to be made fit for net zero in a single step. That is a whole building retrofit, and an example of that is Energiesprong. The crucial point there is that there needs to be a pipeline of projects to allow for economies of scale to bring down the costs of those types of solutions. The Government have put forward £50 million as part of the recent announcement by the Chancellor, but we have estimated that the scale of the investment required is £300 million, to really enable those costs to be brought down and those solutions to be scaled up across the country. By the way, that would also create high-skilled labour across the country, because they rely, for example, on off-site manufacturing, and that would inevitably be distributed depending on the current building stock.

The second area where the Government really need to scale up infrastructure for low carbon is in the transport sector. There were welcome steps in introducing new statutory guidance and reallocating road space, and the commitment to supporting cycling and walking with the £2 billion investment earlier in the year. However, if you really want to lock in some of the positive changes that have been observed during lockdown—more people cycling and walking—as well as the fact that there was, in general, a tendency even before the crisis for the younger generation, especially, to use less of the car, with many of them not even having a driver’s licence, we really need to scale up infrastructure for walking, cycling and public transport. For that, we think the Government should be investing an additional £2.2 billion per year over the next few years in walking and cycling infrastructure and buses. They should also be addressing this for longer distances. There, it is really a matter of scaling up infrastructure for rail and enhancing existing rail networks, but also expanding rail to make sure that there is better connectively between cities over longer distances.

Chair: I am going to stop you there, Caterina. Thank you, Alex, for your questions. We need to press on. We now have a former Transport Minister to pick up on infrastructure—Robert Goodwill.

Q13 **Mr Goodwill:** Thank you very much, Chair.

Following on from the build, build, build theme, I know Caterina and Dimitri have already talked about public investment and the magic tool. My question for Dimitri would be: in terms of reshaping our infrastructure investment priorities, how do you think we should do that in response to the covid crisis? Will we see working from home become a fact of life or will we return to life as normal when things return to normal?

Dimitri Zenghelis: There is a lot of behavioural change, some of which we would like to embed, such as the extent to which we can reduce transport use through working from home and use resources more efficiently; that is great. On the other hand, the worry is that revenues for public transport will fall at a time when you actually want to invest in capacity, because the reason that people are not using public transport is that they do not want to be crowded like sardines.

If the response to the crisis is to reduce capacity and modernisation programmes, so that services become less frequent, you can very quickly have a death spiral of public transport as everyone moves towards driving and single drivers in vehicles. We do not want that for environmental reasons, for congestion reasons and for efficiency reasons.

There are some complex issues as to what we invest in and how we invest, but a lot of the behavioural change—indeed, this very meeting is testimony to the use of technologies and how the world can change very quickly. When we have to, we use technologies in an innovative manner. There is plenty of scope to adopt some of the findings from our response to covid-19.

Q14 **Mr Goodwill:** I have two children who live walking distance away from the office in single bedroom flats. They are desperate to get back to work, but their bosses, who live in nice suburban houses with gardens, want to stay working from home as much as possible.

Dimitri Zenghelis: Absolutely right. The crisis has exacerbated some of the existing inequalities that we had already seen. Caterina and Richard both mentioned that. It is all very well to self-isolate in your big, spacious house while people in their council flats are looking at you playing with your children in the garden—there are very important questions about inclusivity.

A key part of the recovery has to be that it is seen to be fair and inclusive to all parts of society, and that it provides public services that are resilient, rather than underfunded and threadbare, and that people can rely on when the unexpected happens. At the moment, what we have seen has been rather responsive—I will not say "make it up as we go along"; that would not be fair—but there clearly was not the resilience in the public sector to allow us to cope with covid-19.

When it comes to things such as the climate crisis, we know what we have to do. This is not a surprise. It has been around. We have known for decades. We have to make some tough choices about how we purpose our institutions to address those issues.

Q15 **Mr Goodwill:** Should we be revisiting HS2 and Heathrow runway 3, or even reopening the Beeching lines, in the light of the behavioural changes that have been brought about?

Dimitri Zenghelis: People will take different views of different technologies. As I said, I am slightly more optimistic on aviation and the role of synthetic fuels and new technologies. Among environmentalists, I am probably not the best spokesperson for cutting back on aviation, which I think is an area that this country has a comparative advantage in and actually provides not only a lot of jobs, but significant public spillovers through integrating cultures and allowing people to travel. That is a controversial statement from someone who works on the environment.

I am also not going to touch HS2. There are all sorts of economic reasons to do with properly measuring the costs and benefits, and there are far more expert people who could comment on that than me.

I will say that the returns from investing in some of those sectors are hugely important if you seek to get out of an economic recession. The way to get a recovery going—the only way that we will get out of not just the current demand slump, but the pervasive productivity slump—is to invest. If you are worried, for example, solely about public debt to GDP, the best way to reduce that is not to fixate about your current balance, but to grow your way out of it. If you have a mortgage to repay, the best way to repay your mortgage is to focus on getting the income to repay it.

Debt to GDP has GDP in the denominator, but it also has GDP in the numerator. Government debt is a function of the health of the economy and the degree to which you can generate the tax revenues, reduce welfare spending and bring down your debts. If you don't invest in growth—if you don't invest in those kinds of multipliers and resilient, sustainable but also inclusive growth—you are not only not going to provide the high-skilled jobs, the high wages or the security for people across society; you are not even going to meet your Government objective to bring down debt. I think that key realisation is one of the changes that we are seeing this time round, and we have learned the lesson of how we dealt with the recovery post the great financial crash of 2008.

Q16 **Mr Goodwill:** Thank you. Turning to Richard, I know when I was at DEFRA we worked together on a lot of exciting ideas, which I think have turned up in the Environment Bill and in other legislation. Without dwelling too much on great crested newts, bats, or whatever, when the Prime Minister talks about "build, build, build", what impact will the Government's deregulation agenda on planning have on the natural environment? Do you see this agenda as helping or hindering the green recovery, Richard?

Richard Benwell: Thanks for the question. I think deregulation is the sort of second knee-jerk reaction to economic downturn that will lead us back into problems, and it is proven not work. We have, unfortunately, exported around the world the model of a "one in, one out" approach to regulation, where for every pound of cost on business that a regulation introduces, the Government have to find a pound's-worth to get rid of. The Smith School looked at 11 examples of the "one in, one out" approach and found no economic benefits in any of them. The National Audit Office looked at the five-year deregulation programme that the Government undertook between 2010 and 2015, and found that the average saving for business was just 400 quid. Deregulation doesn't save a lot of money for businesses but it can impose a lot of costs on the environment, because of course those environmental benefits of regulation are not factored into that sort of economic calculation that the Government tends to make.

Q17 **Mr Goodwill:** If I could just take two examples from history—the Newbury bypass and the second runway at Manchester airport—we all knew in our heart of hearts that they were going to get built, no matter what Swampy got up to, but it just meant a lot of cost, a lot of delay, and a lot of money spent on public inquiries and lawyers, which could have been spent on environmental mitigation.

Richard Benwell: The idea that huge amounts of money are wasted on environmental regulations in planning is just unfortunately a false premise. Only 0.1% of planning applications actually have to undertake an environmental impact assessment. That is a tiny number. The reason that we are not building—

Q18 **Mr Goodwill:** They tend to be the big ones, though, don't they?

Richard Benwell: They sometimes do, but the way to solve it is not to deregulate; it is to improve the difficult bits of the way they are implemented. We know, for example, that there is a serious dearth of environmental data that means that we often do not discover what is on a site until it is too late. Investment in things like local ecological record centres, updating the inventory of ancient woodland and the inventory of mosaic habitats would help you to avoid some of those problems before you start.

We know that a lot of the logjams are not actually in planning regulations; they are in the advice that comes from the statutory agencies. Natural England is often the logjam, because it does not have the wherewithal and the expertise to deal with planning applications. We know that part of the problem, again, is about investment in ecological expertise at the local level. I think about 94 of our 343 local planning authorities now have a local government ecologist; lack of capacity like that means that ecological considerations are not taken into account properly from the outset.

It is often, to be frank, bad applications by developers who come in knowing that they are fighting an asymmetrical battle and can usually push things through, and who don't do what they are meant to do under the letter of the law in terms of ecological investigation before the planning application goes in. Those are the problems that hold up planning, not environmental regulations.

I refer the Committee to the work that Oliver Letwin did a couple of years ago, looking at the problems in house building, and I remind the Committee that there are a million homes that are consented for development that are simply not being built. It is not consenting that is the problem; it is build-out, as Sir Oliver pointed out. I think the whole premise of Mr Johnson's "newt counting" speech was a false one. It suggested that environmental regulations get in the way of planning and that protected species caused the problem. Those are both false premises. We know it is actually investment in implementation and in the quality of environmental data that is at stake here.

I was pleased to hear Mr Eustice recognise some of those things in his subsequent speech, where he talked about data, but it is crucial that those things complement good planning laws and do not replace them. If you over-simplify the planning system, you start to miss out on all the wonderful complexity of nature that you don't find until you go out and do that survey on the ground. Yes, let's improve planning with things like geospatial data and local nature recovery strategies, but let's not make the mistake of thinking that it is planning laws that stand in the way of development.

If there were time, it would be good, in a minute, to think about the two reforms that are in the Environment Bill that would go a long way to improving the system.

Q19 **Mr Goodwill:** I was going to ask you about net gain and nature recovery networks, which have your fingerprints all over them, I have to say, Richard. Can you see there being conflict with the Prime Minister's "build, build, build"? We need to build houses and we are falling behind Germany, France and the Netherlands, with only 2.25 homes per 1,000 of population in this country, whereas France were at 6.8 in 2018. We need to build houses. Are we going to see conflict between what the Prime Minister wants to do and what people who want to buy new houses want, and the Environment Bill, with its very laudable objectives?

Richard Benwell: The problem with the Environment Bill is that it is not ambitious enough. The two planning measures that are in it have huge potential if they are strengthened. Where we see difficulties in the planning system, it is where there are loose exhortations rather than clear obligations. For example, think of the management plans that exist for national parks. They can be great plans, but because they have no statutory teeth, they don't tend to get implemented.

That is the problem with the proposals for the local nature recovery strategies at the moment. The duty to use them is a duty to have regard to a duty to make a plan. It has several stages of weakness in the chain between making a strategy and implementing it in planning and spending decisions. If that can be done right, and if those provisions can be strengthened, then a local nature recovery strategy can start to marshal all the different data sources that you need to do environmental planning right. It can be a place to make sure that local democratic input, from the people who know about their local area and what they need, can be properly balanced against a national set of environmental objectives.

The second thing in the Environment Bill is net gain. At the moment, it only applies to projects that go through the Town and Country Planning Act and excludes major infrastructure projects. With its planning reforms, the Government are at risk of side-stepping those proposals before they are even on the statute book, by looking at things like zonal planning and permitted development exclusions that might side-step net gain.

On the contrary, the Government should be going in the other direction and saying that as we think about major infrastructure investments as part of our economic recovery, we need to make sure that those are done in a way that is compatible with our environmental goals. Of course, major infrastructure should be subject to net gain and it would impose only a tiny fraction of the cost of those projects to do some real environmental good.

Q20 **Mr Goodwill:** On HS2, we have said that there will be no net loss. There will be planting and all the other things going on, but that is a unique project, compared to many others.

Richard Benwell: No net loss is not net gain, of course. There are crucial things about how you monitor and map the things that actually happen. There was supposed to be mitigation for HS1, and I have never found anybody who can tell me where any of the habitats that were meant to mitigate for the environmental damage of HS1 actually are. The system of net gain needs to make sure that, like you would have for mitigation through the birds and habitats directives and the EU directives, those habitats are properly maintained in perpetuity, logged, mapped and registered, so that people can check and make sure that they are there and doing well.

The last thing to say about the Environment Bill is that it should not become a vehicle for sweeping new powers for reform of the planning system. We have had headlines about senior Government advisors saying they will take an axe to the planning system. The Bill should not be used as a vehicle to give powers to Government to do that through secondary legislation. Absolutely there are improvements that can be made. Mr Eustice has mentioned some of them, such as protecting red squirrels, pine martens and some of those amazing species that are not protected at the moment. But let us do that sensibly and through a consultative process, not by knee-jerk deregulatory reactions in these important laws.

Chair: Thank you. We have two more sets of questions: quick questions and quick answers for this panel. Feryal Clark will start.

Q21 **Feryal Clark:** Dimitri touched on this issue earlier. We have seen coronavirus-related state support packages come with green strings attached across Europe. You mentioned that the French Government and the Dutch have also applied conditions. Even the Welsh Government’s economic contract requires any business there in receipt of direct financial support from the Government to demonstrate its commitment to reducing its carbon footprint. I want to ask the panel what conditions you would like to see imposed on high-emitting companies that have received

Government bail-outs during the crisis.

Dimitri Zenghelis: Shall I have a quick crack at that? To repeat what I said before, I think it will be a mix of technology and efficiency standards that are relevant to their particular sector. For aviation, for example, it might be supporting R&D on synthetic fuels at the same time as taking action in the short run to offset some emissions. Also, for private companies in general, to move towards mandatory disclosure and stress testing, not just looking backwards at carbon emissions down your supply line, but what strategies you have as part of a forward look to keep your sector competitive in the 21st century. Of course, that is to some extent subjective. Shareholders and the Government can be the judge of whether they think these companies are serious about having a strategy that leaves them competitive in an environment where policies become more hostile, where low-carbon technologies become increasingly competitive, where markets begin to close to them if they are too resource and carbon intensive, and, frankly, where litigation starts to take place. As high-carbon companies undertake activities that undermine the livelihoods of millions of people, and do so knowingly, increasingly the courts have been brought in to hold these companies to account. So all these risks are very important, and shareholders need to know about them before they seek to make a choice as to whether they invest in low or high-carbon assets.

Richard Benwell: I have spoken too much already, so I will keep quiet.

Caterina Brandmayr: I would just like to reiterate the fact that, as Dimitri has outlined, we would want conditionality to require companies to set out strategies that get them on track and enable them to meet net zero by 2050. These strategies should be independently audited. Companies should be required also to disclose these strategies so that they are transparent and so that stakeholders and companies can be held to the highest environmental standards. Their action needs to be also monitored year on year to make sure that they really are complying and supporting the transition towards a net zero future.

Dimitri Zenghelis: Is it worth me adding that we published a report last week, together with the Aldersgate Group, where we put out a number of recommendations on conditionality, and on some of the questions that the Committee asked earlier in this session? I am very keen to refer you to some of the details outlined in that report.

Chair: Thank you, Dimitri. Perhaps you could send that to us. Feryal, did you have another question or are you done? You are done. The last set of questions for this panel are from John Mc Nally.

Q22 **John Mc Nally:** My questions are on fiscal consolidation, and the first question is for Dimitri. As you know, Government and taxpayers will eventually have to pay off the huge levels of public debt taken on during the crisis. What approach would you like to see the Government take to do that?

Dimitri Zenghelis: You are absolutely right—there will come a time when we will have to ensure debt sustainability, and that will mean something close to balancing the current budget over the economic cycle. That is a sensible place to be. There is some discussion about what the appropriate level of debt might be that is sustainable. In the present environment, there is excess global desired saving—that is to say, too much saving chasing too little investment worldwide, which is why we are paying the Government to borrow right now, which is an extraordinary state of affairs. If the bond markets were worried about sustainability, they would not be paying to put their money into Government borrowing right now. That tells us something about what the underlying forces behind the present economic environment are, and it tells us something about the fact that not just politicians and Ministers, but the markets are looking for investment in growth. They are desperate to make a return.

Our finding is that, with multipliers of two or three, £1 of Government borrowing will generate £2 or £3 in GDP growth. That translates pretty much to revenue growth that will pay for the extra borrowing. If you are able to borrow for free or negative rates, to stimulate growth and to invest in productive capacity, in innovation and in firms that are competitive and efficient, you really should do so, not only to galvanise spending in the short run and get you out of this hole but to provide a more protracted and sustainable recovery in the future.

Let us not forget that since 2008—indeed, even before 2008—this country has suffered a problem of underlying slow productivity growth and productivity stagnation. Where there has been limited productivity, it has been distributed unfairly. A lot of people have seen no improvement in their real wages for more than a decade. That has to change, and we have an opportunity to do that now. The focus should be on growth, but with a plan in the medium term to ensure that debt is sustainable. That almost certainly now will have to fall on tax increases when the time is right. The time is not right, and the response in the medium term should not be to undermine public services, because we have seen what that leads to in terms of resilience. We have seen what that leads to in terms of fairness and the erosion of trust in institutions and politicians, and the inability therefore to allow policymakers to think long term, to take action that is in the interests of citizens and to be held accountable for it. We have a bit of a political crisis right now—a crisis of trust—and that is all linked to the way we invest in growth and how we distribute the spoils from that growth.

Q23 **John Mc Nally:** Following on from that, could you outline to what extent tax changes could be used to pay off the debt and simultaneously achieve environmental aims? Dimitri, if you could be fairly brief, and then we will go to Caterina.

Dimitri Zenghelis: That is a very important point, and thank you for asking it. In the short run, the best way to generate tax revenues is through growth, so you do not need to change your policies. That needs to be said. Thereafter, we probably will need to change our tax base, and there has been a lot of discussion about how we do that equitably, fairly and efficiently. Clearly, one of the things we want to do is shift the tax base from discouraging things we want, such as work and saving, on to the things we do not want, such as limiting inefficiency, limiting congestion and limiting pollution and waste. Green taxation will play a very big part in that. Shifting the tax base towards green taxation will have benefits not only in terms of paying off the deficit in the long term, but in terms of changing behaviour, meeting environmental aims and stimulating the kinds of investment in productivity and efficiency that generate growth, competitiveness and revenue and also provide the quality jobs that will endure in an increasingly competitive, low-carbon market across the world.

I started by saying that you need a comprehensive approach that is about investment, policy and institutional reform. It is really important to look at the broader social and economic challenges that we face, rather than narrowly fixating on balancing the budget in the short term. Thankfully, the Government has shown itself to be aware of that and is not going to repeat the mistakes of the past, but it is important that we keep emphasising the long-term strategy.

Q24 **John Mc Nally:** Caterina, what do you think about that question?

Caterina Brandmayr: We agree that taxes can play a vital role in supporting more sustainable consumption and stimulating innovation in solutions for the climate and nature, which we want businesses to invest in, while generating revenue for the public purse. It is vital, first, for the Government to adopt a more comprehensive and coherent approach to taxing environmental pollution, starting with more consistently applying carbon taxes, given that some sectors are not bearing the cost of their pollution. However, there are immediate opportunities for changes in taxes that could stimulate more sustainable consumption and I will outline three that we want to see announced later in the year in the Budget.

The first is an increase in fuel duty, because transport is the biggest emitting sector and fuel duty has been frozen since 2010. Estimates show that that has cost the Treasury £9 billion in lost tax. It has also resulted in UK emissions being 5% higher than they would have been otherwise. Now is a particularly appropriate time to consider unfreezing fuel duty, because fuel costs are expected to remain low, so the impact on the consumer could be mitigated. We obviously recognise that other measures need to go alongside that, such as investment in public transport and greater access, so that we are not necessarily just relying on taxation to drive more sustainable behaviour.

The second area where we see an opportunity for a change in taxes is making sure that aviation pays a fair contribution to the public finances. The aviation sector has always been lightly taxed. For example, they are exempt from fuel duty and VAT. It is estimated that, if instead aviation paid the same level of duty and VAT as motorists do on their fuel, tax revenue would increase by more than £11 billion a year. Increasing VAT, introducing excise duty on kerosene, and introducing a progressive tax that reduces demand for aviation will be vital to drive a transition towards a net zero future while ensuring that sustainable consumption is incentivised.

The third point, briefly, is about housing retrofits. We think there is a need to bring VAT on housing upgrades and renovation in line with that for new builds. That is to make sure that we preserve the building stock and make it fit for a net zero future. It would enable, for example, the type of whole-building retrofit solutions such as Energiesprong, which I mentioned earlier, that are currently disincentivised by the higher rate of VAT. It would also make sure that we preserve the emissions that are embodied in the building materials of existing buildings so that those are renovated and refurbished, as opposed to being demolished and built anew.

Chair: I conclude the first panel by thanking our witnesses, Caterina, Dimitri and Richard, for your insightful contributions. Thank you very much indeed.

Examination of witnesses

Witnesses: Tom Thackray, Sue Ferns and Melanie Leech.

Q25 **Chair:** We move straight on to the second panel. I ask our panellists, Tom Thackray, Sue Ferns and Melanie Leech, in that order, to introduce themselves to the Committee.

Tom Thackray: Good morning. I am Tom Thackray. I am the director of infrastructure and energy policy at the CBI. If you do not know the CBI, we are the UK's largest business representative organisation. We speak for small, medium and large companies across the UK and in all sectors of the economy.

By way of an introduction on this topic, we have had many conversations with our members since the pandemic started. There is no appetite for going back to business as usual in the recovery, and a real desire to learn the lessons from the recovery from the last recession—the global financial crisis—where our global emissions reduced for a little while, but then rocketed right back up straightaway afterwards. Our members are signed up to the concept of building back better and believe that improving sustainability and environmental performance is a big part of that.

Sue Ferns: Hello, I am Sue Ferns. I am the deputy general secretary of Prospect trade union. I am here in my capacity as a member of the TUC general council where I lead for the TUC on energy and environmental issues. The TUC is strongly supportive of building back better and of a more sustainable and greener economy, but you will not be surprised to hear that we are interested in the implications of that for jobs, skills, livelihoods and communities.

Melanie Leech: Good morning, everyone. I am Melanie Leech, chief executive of the British Property Federation, which is the membership organisation for the UK commercial property industry. I speak for developers, investors and agents and operators of the buildings that we all go to work in, relax in and spend our money and leisure time in. I also speak for institutional investment in the build-to-rent sector in the UK—

that is rental accommodation managed at scale and in blocks by professional institutions. I do not speak for UK house builders, but if you have questions that touch on house building, I will try as best I can to answer those as well.

Q26 **Chair:** Thank you, Melanie. I will start with a question for each of you. We have just been hearing from Caterina about proposed taxation changes and her recommendation that taxation on retrofit and new build be brought into line. The Government announced £2 billion of retrofit funding in the summer statement, and as we run into the comprehensive spending review, there is obviously an opportunity to do more over the medium term in the rest of this Parliament. Melanie, could you give the British Property Federation's view on the measures introduced thus far, and on whether they go far enough on the environment front, as they do on the economic front?

Melanie Leech: Thank you, Chair. To give a little bit of context, there are around 29 million homes and 2 million commercial buildings in the UK. Of the 29 million homes, around seven out of 10 are in private ownership. Another bit of context is that the built environment is responsible for around 40% of the UK's carbon footprint, and heating is roughly half of that—20% is linked to heating buildings. It is very welcome, and I think it is the first time in five years that a Government have made funding available for energy efficiency in homes. It is a great start; £2 billion is a significant amount of investment, clearly. It has to be a priority for us to tackle energy efficiency in homes.

That will not be enough—it will need to go further—but it is a good start. We now need to make sure that it is spent well. To do that, we will have to make sure that people actually deliver; that those upgrades in homes are fit to carry out that task and are accredited; and that individuals who have to make decisions about how to use the grants that are available do so in a wise way. They are going to need help in understanding what the best options are for them, and they will need assurances that the person who comes to make those changes to their home is able to do so effectively.

It is a great start, but more will be needed, particularly around social housing. I know that the Government have announced £50 million for social housing, but the estimate is that around £3.8 billion is needed, and indeed, there was a manifesto commitment to deliver that scale of investment over time. I think there is a clear opportunity for the Government to take early action to go further.

So far, so good. In terms of VAT, absolutely zero VAT on renovations and improvements to existing buildings would be a great incentive for people to carry out those investments. We think they should do that, and that net zero carbon emissions and environmental improvements should absolutely be at the heart of an incentive scheme.

Q27 **Chair:** Thank you. Sue, you mentioned the need for jobs— obviously, from the TUC's perspective, that is completely understandable. How do you rate the Government's apprenticeship scheme proposals that were announced earlier this month?

Sue Ferns: On the one hand, the proposals announced by the Prime Minister, and the Kickstart job scheme, are to be welcomed, because there is clearly an employment crisis for young people. I have two real concerns. One is the gap between announcing an apprenticeship for everybody and ensuring that you can actually deliver high-quality apprenticeships. I do not actually think that the UK has a great track record in making announcements on such schemes, particularly for young people, and then being able to deliver them at a high-quality. If you look back at the aftermath of previous recessions, we saw a dip in quality. When I talk about that, I am thinking in particular about the 20% off-the-job assessment, which we know—we have seen reports—is already problematic in ensuring the quality of that training. That is an issue that needs attention.

My other comment would be that I can absolutely see the need to get young people into employment right now, but we actually need long-term, sustainable employment.

My other comment would be that I can absolutely see the need to get young people into employment right now, but we actually need long-term, sustainable employment. You will get that only if you link the apprenticeship opportunities to a clear vision for your labour market and your industrial strategy.

Q28 **Chair:** Thank you. Tom, could you give me your perspective on the Government measures so far, particularly in relation to the impact on the environment and some of the other goals? We have not really talked about biodiversity yet. Has that been addressed in the measures thus far?

Tom Thackray: I think the Government has taken some important steps since the pandemic hit, and there have been some unprecedented and game-changing interventions such as the job retention scheme, which has helped businesses across the economy—not least those in green and environmental sectors. The measures introduced by the Chancellor in his fiscal statement a few weeks ago were useful, particularly the green homes grant. That filled a policy gap that has existed for too long. It has the high economic multiplier effect that can boost jobs, particularly in SMEs in that sector. I would say, though, that it is a nine-month scheme, and this area has been characterised in the past by short-term incentives that are taken away without much notice, which creates a boom-and-bust cycle in the industry. We are hopeful that a plan for spending the rest of the £9 billion for energy efficiency, which was outlined in the Conservative party manifesto, will be set out in the autumn statement and comprehensive spending review.

There are also some useful measures around the green jobs challenge fund and some support for specific technologies. Overall, we see that there is much more scope for the Government to set out its agenda, both from a tax and fiscal perspective and from a regulatory perspective, to support firms' investment in green technologies and decarbonisation.

Q29 **Chair:** The previous panel was talking about tax measures to come as a next phase. Dimitri Zenghelis said that will be inevitable—not in the short term, but in the medium term. What does the CBI think about current levels of public debt reaching historic highs? Given the interest rate level, the pressure on the public purse is currently reduced, but what sort of measures do you see the Government needing to adopt in its fiscal policy in order to keep borrowing under control?

Tom Thackray: Definitely, the Government needs to be aware of how much it is spending and its influence on borrowing. I would say that, at the current time, we are still in the midst of a crisis. Firms are still under existential threat, and now is not really the time to be signalling to markets that the support the Government has provided will be pulled away from them at short notice. Having said that, we recognise that there probably will be less political will for austerity measures coming out of the crisis, and that taxes might rise. The CBI recognises that the "polluter pays" principle is sound, but you have to be aware that supply chains are global and you have to move in a co-ordinated way with other economies, making sure that our carbon emissions are not just exported to other parts of the country. Part of that is about how we measure things and making sure that we are measuring consumption emissions as well as production emissions, to ensure that when we make decisions on tax and spend, we do that in the right areas.

Q30 **Chair:** Sue, does the TUC share the CBI's view on fiscal policy at the moment?

Sue Ferns: Our view is that, as Tom has said, the priority now is not to reduce public debt but to take action to minimise the long-term damage to the productive potential of the economy and get it back on a path of sustainable growth. Economists at the IFS and the OBR have said the Government should borrow what is necessary to maintain the strength of the economic recovery. Actually, that is what matters most when managing public debt in the medium and longer term.

Our view is that if you are going to deal with structural deficit, you need to do that cautiously and carefully, and at the right time, after the economy has recovered and is able to achieve its real growth potential. So we would say that fiscal consolidation should not happen for at least a year or two, and beyond that, closing any structural deficit should be something that you aim for over a period of 10 years or more.

Chair: Thank you. We will move on now to questions from members of the Committee, starting with Marco Longhi.

Q31 **Marco Longhi:** Good morning, panel. I will put my first question to Melanie, please. How can the Government best support businesses within your organisation and within the organisations that you deal with to create green jobs? That is the first part of my question. The second part is more related to infrastructure. Whatever we do, we have an existing infrastructure but also a future infrastructure that we want to ensure is as green as possible.

I am labouring a point that is to do with a characterisation I recently heard, namely that our roads are high-carbon infrastructures. However, I wonder whether you agree with that, given that in the future—some time soon, we hope—our roads will be looking at taking electric vehicles or perhaps hydrogen-powered vehicles.

Melanie Leech: On the green jobs point, I suppose that splits into two parts for me. Regarding the industry that I represent, in so far as it is building new buildings, I agree with the comment that one of your previous panellists made that increasingly it will not look like the sensible environmental option to tear down buildings and rebuild them. So most of the buildings that we have now we will still have in 2050. There will be a place for new build, and actually it is in new build that it is easiest and we have seen most innovation in terms of getting close to net zero in buildings, both in build and in operation. But most of the buildings we already have.

My members have already been upskilling in terms of bringing green skills into their organisations. Where I think the real growth in green jobs will come, linked to the property sector and the infrastructure sector, is in the kinds of roles that I touched on in my opening remarks just now, around having to provide the retrofitting of existing building stock. For example, we know—I think there was some talk earlier about this—about heat pumps in domestic homes. We know that we do not have the capacity to deliver the scale of activity to make use of that £2 billion green homes fund. So I think there is a huge opportunity there to link an upskilling and a reskilling strategy to the delivery of environmental objectives.

That probably links to a point related to your second question, which is about an integrated government approach. Whatever the Government policy is, it should have environmental objectives and in particular net zero carbon built in. The Government should not do anything unless the environmental impact has been properly considered and unless the objective of getting to net zero no later than 2050 has been taken account of.

Is a road a positive or a negative in that? Well, a road is a huge positive in terms of connectivity and the economic productivity that might drive. However, it is only going to be a positive that delivers the environmental benefits that we want to see if it is linked to a strategy around greening the transport that uses roads, i.e. cars.

A road of itself is neither a good thing nor a bad thing; what is important is that there is a strategy for transport and connectivity that drives to a net zero outcome within the timescales that the Government set out.

Q32 **Marco Longhi:** Thank you, Melanie. I am just mindful of time. Would Tom or Sue like to like to comment on that first question?

Tom Thackray: I will comment briefly. On the roads point, as well as the use of the road, you also have to look at the emissions and environmental performance of building the road, and that relates to the earlier comments around making sure that we measure all those input materials and their environmental impact.

We must be smart with public procurement as well. Public procurement has historically been characterised by a race to the bottom on price, but there is much more scope to challenge suppliers to take into account emissions performance and environmental performance in the solutions they are offering. My final point would be to say that now is the time to invest in public transport for use of the roads. The problem we have with emissions is largely caused by congestion, and since we have a situation where in parts of the country two thirds of people are still travelling into work by car, that seems like low-hanging fruit, where investment in public transport could start shifting some of that behaviour.

Q33 **Marco Longhi:** Sue, did you want to come in on this?

Sue Ferns: I largely agree with what the other panellists have said, so I will leave it.

Q34 **Marco Longhi:** Thank you. If I could come on to you now, Sue, when we talk about a just transition, what do you believe is needed? How can we ensure a just transition from carbon-intensive sectors to new, greener jobs?

Sue Ferns: The TUC has done a lot of work on this and set out four principles that we think can achieve a just transition. The first is having a clear and funded pathway to a low-carbon economy. We are seeing from Government now various initiatives and announcements, which are helpful but I think still do not provide clarity about what the pathway and timescales might be. I know the Government have said this week that they will publish an interim net zero report later in the year, and that might help, but there are lessons to learn, for example from the recent announcement from the German Government about their investment of €40 billion to phase out coal by 2038. The important thing about that was that that money includes help to restructure regional economies, reskill workers and expand local infrastructure. It is not just an announcement of money; there is clarity about how that money should be allocated.

Very importantly, leading into the second point, that announcement was the product of a commission on transforming the power sector, which brought together all the social partners, NGOs and so on, and worked over a very short period—only seven months—to come up with those proposals. That is the key point about putting workers at the heart of delivering the plans, and that is the difference between that and what we have talked about so far, which is support in principle for a just transition and reskilling and retraining. Who has a voice in that? It was disappointing yesterday that the Government held their first Jet Zero meeting and there was not a single worker or trade union voice in that forum. Germany shows that that is important.

Access to skills funding is clearly at the heart of it. The TUC has called for a right to retraining, but we need to recognise that we need flexibility of provision, because quite often we will be talking about workers who are already skilled and do not need whole new qualifications, but maybe need top-ups and small amounts of retraining, while equally recognising that the economy will continue to change and develop. Having accreditation for their new skills, which allows them to be transferable to other employers, is also really important.

My final point is this: what is the end product? What do these new, green jobs look like? I was struck by a conversation with trade union colleagues in Canada, who have really pushed a just transition, but were disappointed to find that some of the jobs that were offered in the solar power industry were minimum wage jobs. That is not necessarily a good job. We know that in the UK renewables sector, those are not all good jobs. They are not all unionised jobs. There is a resistance to unionisation, but there are also concerns about health and safety and so on in those sectors.

We need to make these changes. Science mandates it, and engineering and technology will make it happen, but that point about a just transition really has to be at the heart of it. I think it would be really helpful if, every time the Government talk about the pathway to net zero and decarbonisation, they also talked about just transition. We can have a conversation in this room, but out there, people need to know what it is going to mean for them.

Q35 **Marco Longhi:** Thank you, Sue. Tom, just briefly focusing on your own members, how are you supporting them to contribute to a just transition?

Tom Thackray: One of the things we are doing to support is providing that brokering service between different industries. As part of industrial strategy groupings in the past, sectors are used to talking to one another about their skills needs, but sometimes those conversations do not go across sectors. What we are seeing at the moment is jobs impacts focused on specific sectors and us needing a transition between sectors. For example, in the aerospace sector, we have seen a high number of redundancies announced over recent weeks. We need to understand what the skills profiles of those people are and how they might fill jobs in the green economy. For example, we have a huge target of increasing the proportion of supply chain content for the offshore wind industry, which we are not meeting yet. How do we redeploy those people in the aerospace sector who have skills that are sufficient to be used in that industry? We are providing some practical support for businesses there.

For us, just transition is accomplished by business investment and the ability to provide those jobs. I agree with Sue's point about having a clear and stable policy framework. That is the fundamental thing. I earmark a few policies that we are waiting for at the moment. There is the national infrastructure strategy, the energy White Paper, a planning White Paper and a heat in buildings strategy, all of which have been waiting and ready to go for a little while now. Setting out that policy will be really important for business investment.

Marco Longhi: Thank you very much, Tom. Over to you, Chair.

Chair: I think Melanie wanted to add something.

Melanie Leech: Just very briefly on this point, there is an example that the Committee might want to look at in the construction sector, which has launched a talent retention scheme. Construction has been very much a boom-and-bust sector. Where there has been lots of investment, there has been lots of activity, and then as the downturn has come in the construction sector, people have left the sector and not come back in again. There is a real effort to try to manage that better, as part of the build back better strategy so that we make sure we keep skills in the sector and are able to deploy them to different projects at different times. I can send some information on that to the Clerk.

Chair: Thank you Marco and Melanie. I think that is an elegant segue into Caroline Lucas's questions regarding house building and planning.

Q36 **Caroline Lucas:** Thanks so much, Chair. I have a question first to Melanie, because I think you were saying that you thought that the Government's energy efficiency announcements were a great start. I think you said that it was so far, so good, but I wanted to just push you a little bit on whether you really do think it is focused in the right areas and whether you think, for example, that a voucher scheme is really going to get us to where we need to be at the speed at which we need to get there, and whether you have concerns, for example, about the fact that some of it has to be spent by March and there are real concerns about whether we are going to get people trained up in time.

Melanie Leech: I do think energy efficiency in homes is a good priority and the right priority, because of the scale of the challenge that I talked about earlier. It is quite hard to see what the options are for a Government to empower individuals and give them an opportunity to make the investments they are going to need to make, but like you, I have concerns about the timeframe and the ability to use a voucher effectively. Personally, I find it quite hard to see an alternative to incentivising each of us who are lucky enough to be homeowners to make the investment we need to make. That has to be an incentive approach.

Q37 **Caroline Lucas:** Do you not see a role for regulation? For example, you could imagine that there could be a requirement, for example, that before you sell your home, you need to have raised it up to a higher EPC, or when you are renting out a property. I think all the evidence suggests that incentives alone do not get people to do that stuff. Most people do not want to sort out all the rubbish in their lofts, for example, so it is not just a financial thing. Therefore, offering a voucher when you are still going to have to provide, if you are able to pay, quite a significant proportion of the total cost as well, is just simply not going to get us where we need to be fast enough.

Melanie Leech: It always has to be a mix of carrot and stick. You can certainly see, in terms of the commercial property sector and the operations of home building and building for rent, which I talked earlier about representing, that there is a role for regulation. There is a role for taxation, too.

I am with Tom on the principle that who pays has to be right. You use taxation where there is a credible alternative or where what you want to do is drive a certain activity out of the market altogether. Where there are no alternatives and you need to incentivise innovation and creativity, that is when you offer incentives. It is always a balance of the two. I think the Government will need to move very quickly if the incentive scheme does not work, for all of us as individuals, to look at other options. I agree with that.

Q38 **Caroline Lucas:** The trouble is that we have been here before, with the failed green deal, and we kind of know that trying to offer, for example, loans, albeit with very high interest rates, does not get us where we need to be. I guess there is a question about whether we say, "Let's bring in the stick now, because we have already seen that, without it, this doesn't work."

Also, as I understand it, because this is not due to kick in until September but can be backdated, it has already had the effect of stopping a whole load of projects that were about to happen, because everyone has stopped now and is waiting for September. It has already had a really negative impact on the sector.

Melanie Leech: I may be over-optimistic because I am one of those sad individuals who sorted out the rubbish in my loft, taking advantage of lockdown. We have to wait and see.

What may be different now is the context. One of the things that coronavirus has done is to focus all of us on what is really important to us, on what our values are and on the role that we can play to contribute to the positive impact on what we see as our values. The context has changed and there is an opportunity—it needs to be constantly reinforced in terms of messages. It may well be that the Government have to look at stronger measures in due course.

Q39 **Caroline Lucas:** Can I put the same question to Tom?

Tom Thackray: I agree that it needs to be the start of the process. Details are still to emerge of how it will work in practice, but it looks to be a more generous subsidy than the green deal previously and, hopefully, that will stimulate some activity in the market.

I would make the point that I referred to earlier—the main thing is that it can't just stop in March. There needs to be some kind of follow-on activity to prevent this scaling-up really quickly and then just having to wither away again.

There is definitely more that could be done in this policy area generally. Green finance has a role to play. Mortgage providers, providing incentives for business to upgrade—

Q40 **Caroline Lucas:** Would you support regulation in this area, though? I am worried about us all saying, "Let's just try it again." We already know that this is a major sector causing emissions. We know that there is a real urgency to get our emissions down and we don't have forever for trying pilots here, there and everywhere, when there is actually an awful lot of evidence out there that suggests that people do not take this up—unless, for example, it is a local authority-led street-by-street process linked with some kind of regulatory framework.

Tom Thackray: I do support regulation in parts of this space. We published a report yesterday looking at the decarbonisation of heat. That recommended that all new boilers fitted in properties, whether old or new properties, should be hydrogen-ready by 2025.

Q41 **Caroline Lucas:** Could you send that to us?

Tom Thackray: Yes, I am happy to circulate that to the Committee.

When there is long lead-time regulation, the market can gear up towards that and they can invest in bringing down the price of those technologies, and it can have a stimulus effect on investment. Where business is worried about regulation is where it is changing from political event to political event and they don't know quite where they stand.

Q42 **Caroline Lucas:** Thanks.

Melanie, I want to come back to you on planning, please, to find out where you and your members stand on the proposed deregulation in the planning system. Do you support that?

Melanie Leech: Yes and no is the answer. You might be surprised at the extent to which we would share the concerns of your first set of panellists that deregulation might result in levelling down in terms of standards, and not achieving the desired outcome, partly because of the draining of resources away from local authorities, some of whom—let's not forget—do not even have plans in place.

For those that do, we know that their resources have been decimated, within planning departments, so their ability to police what they can police, but also to have deregulation within a robust framework—I think there are definite causes for concern about that. We as the industry will share those just as much as some of the lobby groups that you spoke to earlier. I think there are some real concerns around that.

Q43 **Caroline Lucas:** That is really interesting to hear. Thank you. So would you agree, for example, with Richard Benwell when he said that it isn't environmental impact assessments and counting newts that holds up building; it is a whole range of other issues to do with capacity, to do with how much data we already hold, and so forth?

Melanie Leech: I think there is a whole range of things that hold up planning applications, and I don't think he gave you any evidence of it, but I certainly would refute his claim that there are not significant costs attached to those delays where they happen. There absolutely are, even if it is in only a relatively small number of cases.

Q44 **Caroline Lucas:** The figure he gave us was that 0.1% of planning applications need an environmental impact assessment.

Melanie Leech: When we look to the new biodiversity net gain proposals, they will be significantly upscaling, in terms of what is required—and that is right, I think. We don't have any problems with those proposals. We think it is absolutely right, and we know that our customers, the people who will live, work and relax in the places that we build, increasingly want to see those values protected. There is a shopping list, isn't there? There is a whole set of priorities that a development is required to deliver—rightly so; a whole load of different things that a community will want.

All we would ask for is clarity around what are the priorities, what are the things, in terms of social value and investment to the communities, that a development is meant to bring. You can't just keep adding to that list to the point where the scheme is not viable.

Q45 **Caroline Lucas:** Can I just clarify, though, not in terms of what might be coming down the track—net gain and so forth—but in terms of the situation that we have now: have your members found that environmental conditions have delayed house building?

Melanie Leech: As I said, I don't speak for the volume house builders. I wouldn't necessarily, from my understanding and knowledge, isolate environmental impact assessments. I think there are a whole range of things that delay planning applications; I can talk about commercial planning applications, mixed-use developments, and so on. There are a whole range of things that delay those, some for good reason—because the right information isn't provided, or people want to explore more information and create a better scheme by asking for different options to be considered.

That is absolutely right and proper. Sometimes it is to do with the lack of skills that mean that asking for more information is a substitute, actually, for having the confidence to take a decision based on the information you have. There is a whole range of issues, and I wouldn't single out environmental assessments.

Q46 **Caroline Lucas:** I am really mindful of time. Sorry to rush you. I wanted to have one last question: how will you be encouraging your members to protect biodiversity and natural habitats if the planning system is deregulated?

Melanie Leech: I don't need to encourage them to do that, because they already do it—because they know that's what local communities value. It is part of the positive impact they want to have when we develop—

Q47 **Caroline Lucas:** What is the point of deregulating planning, then?

Melanie Leech: The positive of deregulation would be, I think, to cut through some of the bureaucracy that is a substitute for making decisions—which has happened and does happen. But for my members—and I can only speak for my members; I can't speak for every developer across the country—quality, delivering a positive outcome for local communities, is really important. It is clear that biodiversity and a healthy environment, with connections to outdoors and good quality outdoor spaces, is a key part of what will make a community feel that a development has been a positive process for them.

Chair: Thank you, Caroline. The next set of questions is from Barry Gardiner.

Q48 **Barry Gardiner:** Thank you, Chair. Good morning—it is still morning, yes—to our panellists. Melanie, first of all, given what you said about your activities in lockdown, please come round to Wembley: I have a loft just waiting for you.

If I may, I wanted to piggyback on what Caroline has just been discussing with you—her first questions to you about the Government's proposals for helping people decarbonise their homes. You may be better able to tell me this. My understanding is that, in the UK, 17%—or one sixth—of all our homes are social housing and yet, if we look at the scheme that the Government announced on 8 July, there is £2 billion in the green homes grant for home owners, but only one 40th of that amount—£50 million—set aside for social housing, to go to local authorities and some housing associations. Does that not strike you as odd, to say the least, and completely ineffective in tackling those homes that are for the poorest people who are most likely to be fuel poor? It just seems completely the wrong way round. Is that how it strikes you as well?

Melanie Leech: I think I did mention earlier that £50 million against an identified need of the National Infrastructure Authority of £3.8 billion by 2030 feels to me like a missed opportunity by the Government. It is very clear that the Government have a huge opportunity, given the scale of public investment in infrastructure and in housing, to lead by example. Both in terms of the investments they make in infrastructure and in homes, through Homes England, the remit should be made absolutely clear that net zero is a core objective of the investments that they make and the activities that they undertake, but I do think that the Government missed an opportunity to lead by example.

You are absolutely right that investment in energy efficiency in homes not only directly contributes to the net zero target, but tackles fuel poverty and gives people better homes to live in, so that is a missed opportunity.

Q49 **Barry Gardiner:** The Government have said that they want to spend £640 billion on infrastructure over the next five years. As a fiscally prudent Labour politician, I am sceptical about the Government's discovery of the magic money tree, so I want to focus on the dangers of spending all this money.

Melanie, you, at the British Property Federation, have quite rightly talked about providing not just any old infrastructure. You have said that, to ensure the correct infrastructure, the Government should provide clarity on long-term investment. Tom, at the CBI, in your covid-19 net zero recovery principles, you told the Government that they should prioritise public spending on low-carbon programmes that lay the foundations for a resilient net zero economy.

Let me take Tom first. What do you see as the risks of locking in high-carbon infrastructure investment as part of the recovery package?

Tom Thackray: There is probably a risk of spending infrastructure money in the wrong way, but there is quite a lot of consensus around what projects are available and shovel-ready and what their contribution will be to the economy, sustainability and environment if we have a national infrastructure assessment. We are awaiting a national infrastructure strategy. The CBI has a long list of shovel-ready low-carbon projects.

Q50 **Barry Gardiner:** May I interrupt? I am not wanting to know what we can do. What I want to get your thoughts on are the risks of doing the wrong thing and the dangers of doing that—if we are to lock in high carbon infrastructure rather than green, resilient and sustainable infrastructure.

Tom Thackray: The risk, obviously, is that we do not get on a pathway to meeting our net zero target. The Committee on Climate Change has said that there are currently parts of the policy programme where we have not made enough progress to secure that infrastructure investment, so heavy industry and manufacturing have been in a blind spot, as has heating efficiency, although that has been somewhat addressed by the Chancellor in his statement.

Heading back to the report that we published yesterday, without the regulatory signals about what we are going to do about heat decarbonisation, you can see a lot of sunk costs and stranded assets in heat infrastructure that will never be used. What we need is a long-term programme for how we will decarbonise the market and start to gear up in that way.

Q51 **Barry Gardiner:** Have you done any research into quantifying the extent of what those stranded assets might be if we do not take the right decisions?

Tom Thackray: As the CBI, no, but many of our members have looked at that from a sector perspective. I am happy to follow up with the Committee and give some analysis, if that is useful.

Q52 **Barry Gardiner:** That would be hugely helpful, thank you very much. Melanie, did you want to come in?

Melanie Leech: I do not think I have much to add to that, actually.

Barry Gardiner: Sue?

Sue Ferns: No, I have nothing to add to that, thanks.

Q53 **Barry Gardiner:** Thank you. Almost as surprising, perhaps, as the Government's theft of Labour's magic money tree is the statement from Edmund King, president of the Automobile Association, that the £2.9 billion earmarked for road building by the Government in June might be better spent on broadband to support homeworking. I want to quote him in full, so I do not get accused of misrepresenting what he said. He said:

"Arguably in future, we should invest more in broadband because what this current crisis has shown is that the majority of companies can continue working from home, and it can be more efficient. People travelling up and down motorways just to hold meetings is inefficient, expensive and not good for the environment. I think use of roads and rail and indeed bus will be reduced after this crisis."

That is the president of the Automobile Association. Sue, do you think that road building projects should be included at all in the covid recovery? What do you think the balance should be between investment in public transport versus active travel and roads?

Sue Ferns: The TUC's priority would be investment in public transport, for obvious reasons. I do not think that roads should be excluded completely; I am thinking particularly of rural communities that do not have good transport infrastructure. If they are going to be much better served by public transport, that is fine, but I also think that it is all very well for all of us who live in cities that are well connected with other transport options to rule out the importance of roads. For some of those rural communities, road building and road improvement schemes will still be important.

I think that Edmund King is probably right on the balance of investment. I think that the current crisis has shown our huge dependence on good broadband connections and where they are not available, so that is clearly an important area for future investment.

However, I also think that we have to bear in mind the equality implications of that for people in poorer communities and BAME communities who do not have the option to work from home, who do not have good housing or domestic circumstances and who do need to go out to work, and for people who work shifts, who need good public transport options to get them home at the end of their shift.

Q54 **Barry Gardiner:** Thank you very much. To try to summarise that—road improvement, as opposed to new-build, particularly for rural communities, and I presume from what you said, Sue, that that would go hand in hand with increased investment in local bus services, for example, to make sure that there is that public transport provision available. Does that get it about right?

Sue Ferns: Yes.

Q55 **Barry Gardiner:** Thank you. Finally, I turn to the national infrastructure strategy, which is due to be published later this year. I think all three of you indicated that you think that the Government should use it as an opportunity to embed net zero and nature recovery in the economic stimulus package. If you were writing the strategy, please could you outline three things that you would include—one for transport, one for natural or green infrastructure and one for technology. Tom, do you want to start on that?

Tom Thackray: Okay. I can give you some policies that I hope will be included on the transport side. We have been advocates for public investment in the electric vehicle charging network. We think range anxiety is a reality at the moment, and particular support should be given to areas where the market will not deliver. The Government could help pump-prime some of the delivery bodies to produce electric vehicle charging at a much faster rate than it is currently being delivered, working through some of the distribution networks to get that done even quicker.

On the technology side, I think that one of the major pieces of investment that we need is in the infrastructure to deliver carbon capture and storage.

Some £800 million has been earmarked for that, but it does not come with any detail about the kind of assets that will be used to develop or how it will provide a route to market for the industry that is starting to grow. That is the technology side.

The first point was about nature-based solutions. Businesses are looking for the long-term objectives we are trying to achieve when it comes to the natural environment. On carbon, we have had the Climate Change Act for a number of years. That set the long-term goals for carbon reduction. We do not yet have those outcomes on the environmental side. Establishing that framework for what objectives we are trying to achieve would be useful. Hopefully that will emerge through the Environment Bill later in the year.

Barry Gardiner: Thank you.

Sue Ferns: On technology, I would like to see a ramp-up of research and development into a range of energy technologies. We will produce a report shortly that shows that real spending on renewables R&D between 2010 and 2018 declined by 60% overall, including a decline of 71% in geothermal, 52% in wind and 42% in solar.

As we sit here, we cannot rule out any of those options. The only way we can make them a reality at the scale we require is by continuing to invest in R&D. I would like to see an increase in R&D. That is our technology option.

In relation to transport, we talked about the importance of public transport. But I agree with Tom that if we are to make electric vehicles a reality, we need that investment in the charging infrastructure. Without that, we will never make that breakthrough. That is really important.

In terms of the natural environment, we are very supportive of investment in forestry and restoring peatlands, because we know that they make a contribution to decarbonisation, but they also greatly improve people's quality of life.

Melanie Leech: We would be largely aligned with the CBI's view. Sue made some important points, too. Rather than find three different things to say, I would add that it is important—reflecting on the important points Sue made around inequality—that we are not only looking at the hard numbers of the economic impact, but putting that in a broader context of quality of life.

We are looking at that in the context of balancing inequalities and the levelling up agenda. In the review of the Green Book, we are arguing that the Government and the public sector should genuinely be able to look beyond just the narrow economic metrics when making decisions, to think about the total quality impact of a project.

My aspiration—to add to the specific points the other witnesses have talked about—is that the commission's report on strategy addresses those points around inequalities, levelling up and quality of life, as well as economic stimulus. That is not to say that I do not think economic stimulus is important, of course.

Barry Gardiner: No, indeed. Tom, one of your reports concluded that what is needed above all, particularly from the strategy, is certainty, because that will provide the framework for everyone to plan ahead and ensure we deliver on the targets.

I apologise for the noises from my local council repairing my footpath outside.

Chair: I thought it was somebody breaking into your loft. Thank you, Barry. The last set of questions will be from Claudia Webbe.

Q56 **Claudia Webbe:** Thank you, Chair. A fifth of the emergency business loans that have been issued thus far have been to firms in high-carbon-emitting industries. We have heard from the Bank of England why it did not apply conditionality in its terms. Do you support placing sustainability conditions on firms that are receiving substantial sums of public money? If so, what form do you think it should take? That question is for Tom and then Sue.

Tom Thackray: I think that, theoretically, principles of conditionality could be used to make sure that Government capital is used to support best practice and ultimately the law. Our net zero target is now law, so it makes sense for those in receipt of Government money to uphold what we are trying to achieve with those targets. There is an opportunity when some of those loans potentially get converted to equity, which I know is a live policy debate at the moment. When the Government has an equity interest stake in these companies, that probably gives it more leverage to ask for that conditionality. It is obviously very important to get the parameters right. The European Union has done quite a lot of work recently around the sustainable finance taxonomy and the types of things that you can require, from a legal perspective, businesses to do. In principle, I think it is absolutely right that those in receipt of Government money should help to achieve the Government's objectives.

Q57 **Claudia Webbe:** Thank you. Sue, can you pick up more on what form you think this should take?

Sue Ferns: I would like to locate my answer in the sustainable development goals and range a bit wider, because the sustainable development goal talks about sustained, inclusive and sustainable growth, with full and productive employment and decent work for everybody. So the TUC's view is that there should be conditionality for bail-outs, and conditionality should range across three issues. One is fair pay plans in the organisation. The second is that companies that receive a bail-out should pay their fair share of corporation tax in the UK, and the third is that they should promote decent jobs. That is the TUC's position on this question.

Q58 **Claudia Webbe:** Melanie, I don't know if you want to come in, but I have another question. If you are itching to come in, please do.

Melanie Leech: I am not itching to come in, but I am largely aligned with Tom.

Q59 **Claudia Webbe:** Okay. We have got an autumn Budget coming up—this is my final question. What is the most important step that the Chancellor could take in the autumn Budget to align the recovery with the UK's net zero commitments?

Tom Thackray: In an organisation like the CBI that covers the whole economy, obviously we have very many asks of the Government ahead of the autumn Budget, but I will try and summarise slightly. On the fiscal commitment, the long-term strategies are just as important: the national infrastructure strategy, the energy White Paper, and the heat in buildings strategy. We certainly want to see those published. I would like to see how the £9.2 billion allocated in the Conservative party manifesto for energy efficiency will be allocated in the future, including the money for social housing that has been promised. The £800 million for carbon capture and storage, as I mentioned earlier, is a really important investment, and we need to see some details about how it is going to be spent. I have not mentioned that we have advocated a net zero mobility credit, which would give people the option to scrap their high-carbon transport options and move towards lower-carbon forms of transport, be that electric vehicles or scooters. That kind of thing would be welcomed by industry.

Q60 **Claudia Webbe:** Okay. Melanie?

Melanie Leech: Property, buildings and real estate are a long-term business. Projects like King's Cross or Paradise Circus, Birmingham, take decades to deliver. For us, the single most important thing is that there is as much certainty as possible over the longer term and, as we talked about with Caroline earlier, locating short-term tactical interventions in a long-term strategy, with a clear direction of travel, and, within that, the combination of carrot and stick. You can see where regulation will come, if incentive interventions don't work. Just having that long-term strategy, and sticking to it, is the single most important thing for us.

Sue Ferns: I don't disagree with the importance of a long-term strategy, but in addition to that there are sectors that need immediate help. The first panel talked about the huge challenges faced by organisations like National Trust, for example. I know from my union's membership that organisations like Natural England and the Forestry Commission are suffering hugely at the moment. They are not out of the coronavirus mire and they could really do with some immediate support. That will be important to safeguard our natural environment. That is obviously long term, but they need the support now.

Government needs to be clear about the importance of immediate investment in our energy infrastructure, flood defences, climate change mitigation programmes and, as Barry mentioned in his question earlier, broadband roll-out across the country. Not all of that will happen immediately, but I think we need very clear commitments in the autumn Budget that that is what is going to happen, and that Government will support that.

Q61 **Claudia Webbe:** My final question is that I am perplexed about the Bank of England's lack of conditionality on its packages of support. Do you think there is anything that we can do or that the Government ought to be doing about that, in terms of ensuring that there is a test based on the climate situation, in order to secure finances or funding, which is essentially from the taxpayers' purse?

Tom Thackray: From my side, the principle of conditionality is there. In a time of crisis, one of the most important things is getting the money out of the door quickly. In the midst of the existential threat that businesses were facing, trying to keep things as simple as possible is the right thing to do. Putting conditionality on to some of the sustainability and climate conditions is quite complicated. That is not to say that we should not try to achieve that and work on it with the support that comes now, but I don't think I would overly criticise the Government or the Bank of England for doing things simply to start off with.

Sue Ferns: I think there is something in there about not just conditionality at that point, but how to continue if Government money—or our money, taxpayers' money—is going into bail-outs. What influence can we have over the future development and future strategy of those organisations? The TUC has argued for equity stake investment, which would allow at least a degree of influence over the future development of those organisations and over their behaviour, and try to generate a public interest return.

That is not a complete answer to your question, but it is one element of conditionality around that that would enable a continued influence to be exercised, balancing out the need for the crisis support, about what our future aspirations are and the need to drive to net zero.

Claudia Webbe: Thank you very much.

Chair: That brings us to the end of our second panel on this fascinating subject. I thank our witnesses, Tom Thackray, Sue Ferns and Melanie Leech. I thank the Committee for giving up the first morning of their summer recess for this session and the Committee specialist, Nick Davies, for putting together the briefing for today.