

# Environmental Audit Committee

## Oral evidence: The financial sector and the UK's net zero transition, HC 308

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Members present: Philip Dunne (Chair); Sir Christopher Chope; Barry Gardiner; Caroline Lucas; John McNally; Claudia Webbe.

Questions 170 - 243

### Witnesses

[I](#): Baroness Penn, Treasury Lords Minister, HM Treasury; Fayyaz Muneer, Deputy Director for Green Finance and Prudential Policy, Financial Services Group, HM Treasury; Lord Callanan, Parliamentary Under-Secretary of State (Minister for Energy Efficiency and Green Finance), Department for Energy Security and Net Zero; Amy Jenkins, Deputy Director, UK Net Zero Investment and Workforce, Department for Energy Security and Net Zero; and Zoe Norgate, Deputy Director, International Net Zero: Green Finance and Capability, Department for Energy Security and Net Zero.



## Examination of witnesses

Witnesses: Baroness Penn, Fayyaz Muneer, Lord Callanan, Amy Jenkins and Zoe Norgate.

Q170 **Chair:** Good morning and welcome to the Environmental Audit Committee for our final hearing of oral evidence on our inquiry into the financial sector and UK's net zero transition. We are very pleased to welcome two Ministers from two different Departments: Baroness Penn from the Treasury and Lord Callanan from the Department for Energy Security and Net Zero. I would be grateful if you introduced your officials who are accompanying you, starting with Lady Penn.

**Baroness Penn:** This is Fayyaz. I will let Fayyaz introduce himself.

**Fayyaz Muneer:** I am Fayyaz Muneer. I am the Deputy Director in the Financial Services Group in the Treasury for Green Finance and Prudential Policy.

**Lord Callanan:** I am accompanied by Amy Jenkins who is our Deputy Director in the Department for Energy Security and Net Zero.

**Zoe Norgate:** I am Zoe Norgate, Deputy Director in International Net Zero in the same Department.

Q171 **Chair:** Just before Easter, the Government published the Green Finance Strategy 2023 iteration, building on the 2019 version. It would be helpful as a scene setter if you—I expect this is a question for Baroness Penn to start with—enunciated for the Committee the key differentiators between the latest plan and its predecessor, and the aspects that you want to highlight to the Committee that are new and bold and ambitious.

**Baroness Penn:** First, the updated plan builds on the original plan that we published. It is all about two things: aligning financial flows in the financial services sector with our targets towards delivering on net zero and nature recovery, and driving investment in the technologies and the businesses we need to get there.

The Treasury's responsibility is much more on the alignment side of things. There we have sought to articulate in more detail the commitment we made at COP26 to become the world's first net zero-aligned financial centre. That is focused on three things: the first is transparency, where we have set out further steps on how we plan to implement sustainability disclosure requirements or SDR. That includes commitments to endorse and adopt the international sustainability disclosure standards from the IFRS and new plans for the UK's largest firms to publish net zero plans. It is looking at the tools for transformation, so setting out our plans for delivering a usable and useful green taxonomy with a consultation later this year on that approach and a consultation on regulating ESG ratings providers. It looks at the transmission channels for delivering that investment, so the Solvency UK reforms or our plans around reforming



local government pension schemes and, of course, our green financing programme.

To bring that together and to make sure that we track our progress, we have talked about our plans to publish KPIs to look at how all of that is being delivered over the course of the Green Finance Strategy; we will articulate those by 2024. That is the Treasury side of the updated Green Finance Strategy. I do not know whether Martin wants to add anything.

**Lord Callanan:** I am happy to do so, thank you. Obviously we work closely together. The Treasury has overall responsibility for the strategy, but clearly there is a big involvement from my Department as well. As Baroness Penn has said, it very much sets out how the Government are deploying the public levers, creating an attractive investment environment, working with a range of public financing bodies to commercialise and finance the green technologies that we will need.

In my Department, we were very grateful to get £30 billion of committed domestic investment across a range of different programmes and policies: £6 billion for energy efficiency, £20 billion for the CCUS programme. The idea of this is to provide clarity and confidence to investors, coupled with a stable regulatory environment and long-term business plans in the various sectors. You will have seen, Chairman, that we set out a number of investor road maps on offshore winds and heat pumps, as well as updated road maps on CCUS and hydrogen, setting out what the business cases are for the considerable sums of private investment that we will need to finance what will be a green industrial revolution.

Q172 **Chair:** You have touched on a number of issues that we are going to zone in on in our questioning. I will not try to duplicate what others are going to say later, but could you give us a sense of how well received this has been within the financial community? We wrote to, I think, 50 financial institutions who had signed up to the declarations in Glasgow as part of COP26 and, generally speaking, had positive responses from them. Some we wrote to have not responded, and some appear to have backtracked a little on the commitments that were made. Is it your sense that the financial community are bought in to this agenda voluntarily or do you sense that we will need to introduce some mandatory measures?

**Baroness Penn:** In my experience, it has been broadly welcomed by the financial services sector and the financial community. We launched a call for evidence and a lot of the work that we put into the Green Finance Strategy draws on the feedback that we have had from the input into that. It builds on the previous Green Finance Strategy that we set out.

I think a lot of firms see the opportunity for them in the green finance space. One of the aims of the Green Finance Strategy is to build on the UK financial services growth and competitiveness internationally and make us a real leader in this space. Just before we updated the strategy we were again deemed to be a world leader in an annual report on green



finance. I think people welcome it and see the opportunity as well as the need to manage the risk in their portfolios.

Q173 **Chair:** On the subject of risk, have your officials been looking to compare what we are demanding of companies that are under our regulatory regime with regulators in the other main financial centres? Is there risk of leakage of business because we are being overly ambitious?

**Baroness Penn:** We are conscious of that risk and in all the work that we do to try to lead on this area, we are also working internationally to try to build consensus and support so that others come along with us. A good example of that is TCFD, so climate-related financial disclosures, where the UK was the first jurisdiction to implement it economy-wide but we also used our G7 presidency to get the commitment from other countries to follow suit.

When we look at the disclosures we are requiring of other areas of policy, we are also looking to align with international standards so that for companies that operate across multiple jurisdictions the burdens are minimised as far as possible when it comes to reporting on these issues.

Q174 **Chair:** This is the final question from me at this point. How will you measure the success of the strategy and do you have some metrics that you can share with the Committee that you, as a ministerial team, are applying to this proposition?

**Baroness Penn:** As part of articulating what it means to be a net zero aligned financial centre, we have said that we will develop and publish some key performance indicators that help us target our policies and measure those outcomes. We want to engage widely with stakeholders on our approach to those KPIs, so we are looking to finalise that framework in 2024.

To give you a flavour, we look at them potentially covering topics such as the quantity and the quality of sustainability reporting and transition plans, the consistency of the financial flows with our climate goals, the size of green finance markets and jobs and skills in green finance and, as I touched on before, the competitiveness of the UK as a green global financial centre.

Q175 **Caroline Lucas:** I wanted to come on to transition plans and, in particular, the Government are going to consult later this year on requiring companies to disclose their transition plans if they have them. At COP26 it was promised that these transition plans would be mandatory, so can you explain why you have stepped back from that?

**Baroness Penn:** We see this as moving towards delivering on our commitment at COP26. We already have rules in place from the FCA for asset owners, asset managers and listed companies to disclose their transition plans on a comply or explain basis. We envisage a similar approach when it comes to companies across the rest of the economy. Then it will be for those companies to explain either how they plan to



transition or, if they do not have a plan around that, what that means for the company and the investors in that company in a world where we have very clear climate goals in the country and public policy will move to deliver that.

Q176 **Caroline Lucas:** You will not be surprised that I say that that sounds incredibly weak. It is a very limp stick to ask companies to comply or explain. Given that at COP26 you had a more ambitious position, I would like to understand why that has changed. In particular, it looks as if this is a giant loophole because companies can simply avoid disclosing anything by saying, "Sorry, I don't have a plan."

**Baroness Penn:** Two things on that—Fayyaz, come in if you would like to. We see this as delivering the commitment at COP26 of moving towards mandatory disclosure of transition plans.

**Caroline Lucas:** COP26 was mandatory disclosure, not moving towards it.

**Baroness Penn:** Mandatory disclosure of transition plans, and disclosure can include if you do not have a transition plan. To move back to the Chair's question earlier, touching on two things, one is around being a leader in this area but ensuring that we continue to be internationally competitive. On transition plans, we are a leader with the requirements we already have in the plans to introduce them wider in the economy.

The other point is that we are seeing demand from the market itself in companies' plans to transition. The companies that are not able to articulate what their plan is will face challenges from investors and others around what their plans are and how they will manage to operate in that environment.

Q177 **Caroline Lucas:** With respect, that almost feels like an argument for making it mandatory. If already you are saying that the market is moving in that direction and it is going to be required, why not make it simpler, speed it up, given the urgency of all of this, and have a level playing field where everyone knows that they need to make those disclosures now?

**Baroness Penn:** We think it is for firms and shareholders to decide how their business adapts to the economy-wide transition that we will have, given our legally binding net zero targets. A good transition plan will set out these decisions in a publicly comparable way. It will quantify the interim targets and milestones they have to meet their firm-level goals. It is for the companies to define how they plan to transition in this environment.

Q178 **Caroline Lucas:** I am not going to persuade you, but it seems to me that no one is arguing that it is up to the businesses to discuss and set out how they are going to transition. What we are talking about here is whether or not they should disclose that and whether that should be mandatory. It seems to me to be a massively wasted opportunity to row back on what was agreed at COP26.



**Fayyaz Muneer:** I do not believe it is rowing back. The announcement at COP26 was that we would move towards making it mandatory for relevant firms to disclose transition plans. That might seem a semantic difference, but the important point is that a lot of firms signed up to GFANZ or various other coalitions to say, "We are going to have a net zero target, we are going to do this, we are going to do that." It is absolutely right that if a firm is going to say it has a net zero target, it is going to transition, it has to disclose how it is going to do that. The idea of comply or explain is if you do not have a transition plan you basically have to front up to your shareholders who ask you some very difficult questions about your actual plan.

As the standards around transition plans develop—I am sure we will come on to the Transition Plan Taskforce—the line for what counts as comply gets harder and harder. At the point of COP26 there was not a gold standard for transition planning. That is something that we are trying to develop, but there might be questions about TPT later so I will leave it there.

Q179 **Caroline Lucas:** I will move on. In your view, what balance should a transition plan strike between ramping up green investment on the one hand and reducing investment in fossil fuels on the other?

**Baroness Penn:** It will be for the individual company or business to determine that. If they have articulated their vision to meet their being net zero by a certain date or time they need to look at their business and what affects their business and articulate that for themselves. It is not something that we define but, as Fayyaz said, when we first announced the intention to move towards the transition plan disclosure we identified the fact that there was not a gold standard for the framework about how these disclosures should take place. That is why we set up the Transition Plan Taskforce. They launched draft guidance at COP27 last year. I believe they consulted on that. Consultation closed earlier this year and we are looking to produce finalised guidance by the end of this year, so that there is the gold standard that allows people to have transition plans published on a comparable basis.

Q180 **Caroline Lucas:** You may have a similar answer to the follow-up question, which is about the role that energy security concerns play in the transition plan guidance that the Transition Plan Taskforce is developing. Do you feel that Government have a role in guiding that or not?

**Baroness Penn:** I might hand over to Lord Callanan to touch on energy security, but the TPT itself is about providing a framework so that the information produced by firms articulates very clearly what they see their path towards transition is rather than us defining their path.

The Transition Plan Taskforce brings together a whole range of different voices, from government, the private sector and different sectors of the economy to academia and NGOs, to ensure that we are taking into



account all of those different views when producing this guidance, that it works for the producers of the transition plans, the firms themselves, and the users of those transition plans to, but I do not know whether Lord Callanan has more to say.

**Lord Callanan:** I am happy to add to that. We see that energy security and net zero are effectively two sides of the same coin. We will never convince the public to go along with our transition plans if the lights go out, so we need to have energy security at the core of our mission, but we do not think there is any tension necessarily between securing energy supply, cutting the carbon and, of course, low prices, given that the current pricing of renewables is extremely cost-effective compared with oil and gas infrastructure.

It is a transition though, and we have to recognise that. We will still need supplies of oil and gas in the UK over the next few years. Even at net zero we might still be using a quarter of the gas that we use now, albeit it is coupled to CCUS to mitigate the reductions.

Q181 **Caroline Lucas:** I sincerely hope we are not. You say that energy security and net zero are two sides of the same coin and there should not be a tension. Clearly there should not be a tension and many of us would say that the best way of achieving energy security is precisely by shifting much faster to green energy sources, but right now there clearly is a tension. The reason that the Government keep citing for going ahead, for example, with giving the green light to 100 new oil and gas licences in the North Sea, is because they argue it is needed for energy security, even though we know that the vast majority of that oil will get exported because it is not suitable for the refineries that we have here.

In a previous hearing that we held on this subject, the Head of Climate Change at HSBC, Tim Lord said quite clearly that he felt that the investment in climate would be much healthier were the Government to be sending more consistent messaging. My challenge to you is investors are telling us that they feel that the Government have mixed messages. On the one hand you have lots of very nice language about green transitions and so forth, but at the same time the Government are giving the green light to more and more oil and gas extraction. Those two things simply are not compatible.

**Lord Callanan:** They are compatible. I don't agree with you. It is a transition; there is still a requirement for oil and gas. I know you are pessimistic about the UK's transition but we have the fastest rate of decarbonisation in the G7. We are making rapid progress. I know you and many other stakeholders want us to go further and faster, but 40% of our electricity last year was from renewable sources. We have ambitious plans to ramp that up and take it further. At the same time, though, 80% of the space heating in the UK is delivered from gas. Unless we are going to disconnect people from their supplies overnight, which I am sure you would not advocate, it is a transition. We have to do it gradually.



We get about 40% of our gas now from our own resources. The rest is either imported from Norway or imported through LNG, which, as you will know, is very carbon intensive. Through the transition, as we gradually transition away from it, surely to get that resource our own resources if we can makes sense from an energy security point of view but also from a carbon intensity point of view. It is better for the planet and for the environment if we need those resources to get them from the North Sea than to import them in tankers from Qatar or wherever.

Q182 **Caroline Lucas:** We also know that the carbon intensity of the oil and gas that we import from places like Norway is not as carbon intensive as our own, so that is a red herring.

**Lord Callanan:** We get about 20% from Norway as well.

Q183 **Caroline Lucas:** I am aware that the Chair will probably redirect me to the questions in front of us, so in the Green Finance Strategy the Government announced a review into transition market finance. What are the timescales for that review, because that was not made clear?

**Baroness Penn:** We are launching that review because we see transition finance as a key part of delivering on both green finance and our net zero targets. It will consider what the UK financial and professional services ecosystem needs to do to become a leading provider of green transition financial services and innovative instruments. The intention is that it will be led by an external expert and we plan to set out next steps on that later this year.

Q184 **Caroline Lucas:** In other words, you do not know when it is going to start.

**Baroness Penn:** We are still working to develop its terms of reference and the right mix of experts to contribute to it, but we plan for it to start this year.

Q185 **Caroline Lucas:** How will the work of that review align with the work of the Transition Plan Taskforce?

**Baroness Penn:** The Transition Plan Taskforce is all about articulating what a gold standard transition plan for firm-level transition looks like so that for those who are caught by the comply or explain regulations, when it comes to publishing their transition plans have a gold standard and clear guidance on how best to do that. It is very new for a lot of firms.

The transition finance market review is all about what financial instruments and market tools can be and need to be developed to support transition finance to support companies in delivering their transition plans, so delivering the articulation of what their plan is to transition to net zero.

Q186 **Chair:** Could I pick up on one comment from Lord Callanan? You mentioned the lower cost of renewable energy versus gas. There has been an auction round for the Celtic Sea for the latest set of licences. Are



you able to update the Committee on the outcome of that round? There was some scepticism at the time as to whether there would be enough bids to make it successful.

**Lord Callanan:** I have not seen the latest results of that. I do not know if any of the officials have any of those numbers. Perhaps we could get back to you, if that is possible.

**Chair:** It would be helpful.

**Lord Callanan:** It is not my direct ministerial responsibility. It is the responsibility of my colleague Graham Stuart. Apologies for that, we will get back to you. I do not know whether we are in a position to make any public announcement on it yet, but if there is information we will send it.

**Chair:** I may be pre-empting the normal schedule for announcing it, but if I have missed it, it would be helpful.

Q187 **Barry Gardiner:** Lady Penn, in response to Caroline Lucas, you talked about the comply or explain providing a way in which there would be—I think I quote you correctly—a publicly comparable way in which to compare transaction plans, but of course that is not the case, is it? With each company preparing its own plan, there is no guarantee there is the same baseline or that they are even to the same timeframe, is there?

**Baroness Penn:** Each company will be operating to its own baseline and its own articulated timeframe.

Q188 **Barry Gardiner:** Your phrase is “publicly comparable”. They are not publicly comparable because they do not have the same baseline and they are not in the same timeframe.

**Baroness Penn:** The Transition Plan Taskforce is seeking to create a framework so that companies that are disclosing their transition plans are disclosing them in a very similar way. One thing that may be compared is the timeframes that they are articulating they will transition to and the pathways that they will take to do that. That is then providing information into the public domain to allow people to assess the credibility of their plans to meet what they have articulated as their own targets.

Q189 **Barry Gardiner:** I take your revision, therefore, to be that because they will be publicly available, we as the public will be able to look at them and say, “This one operates on this timeframe and that is unrealistic but this one operates on another timeframe and that is better.” The comparability is more in that they will be disclosed and we will then be able to decide what we think about them, but they are not comparable in the sense that they are each to a standard metric and that they are each using the same basis to transition to net zero; is that correct?

**Baroness Penn:** I will let Fayyaz come in but, to be clear on the role of transition plans, it is not for Government to impose on firms what their plan for transition should be; that would be moving towards saying you



need to move towards the same timeline or on the same path. It is about having comparable plans for the firm's own articulation of meeting their goals. Fayyaz, did you want to pick up on that?

**Fayyaz Muneer:** Briefly, if that is okay. Right now you are entirely right, especially on the regulatory framework. The real motivator for starting the TPT was that a gold standard for making a transition plan did not exist. It is basically why we launched this thing and why we brought together a very broad church. Almost you can think about it in levels of comparability. The first level will be: has X disclosed a transition plan versus Y? If one has not and one has that probably tells you quite a lot.

**Barry Gardiner:** That is a pretty low bar.

**Fayyaz Muneer:** That is a pretty low bar. Then you go down or up the ladder, depending on how you look at it, and it will be: is the transition plan that has been disclosed to the standard that the TPT has developed? Obviously it has not finalised that and it is a work in progress, but that is ultimately what we see the role of the TPT as being. Then you go even further down, even in the domain of transition plans that are to a TPT-aligned standard or however you want to put it, or who has the most timely or the best one. There are levels of comparability. You are right that currently the TPT has not finalised that plan. That is very much the goal.

The problem that you have pointed out is what motivated the launch of the taskforce, because you do want some comparability, a standard that you want people to be meeting if they are going to say they have a credible transition plan, whether it is in the metrics they use, how interim the metrics are and the interim targets. It is no good just having a 2050 target but saying nothing about how you are going to get there. I agree that is not particularly decision-useful for markets and investors and things like that.

Q190 **Barry Gardiner:** I get what Mark Carney said to the Committee when he came before us. He said, "If I could stress one point in today's session it is the importance of a mandatory comprehensive framework for net zero transition planning." I accept the point that he went on to say that they should be phased in over time, but it has to be mandatory and it has to be comprehensive. One of the real lacunas in all of this, the problems with it, is where is the accountability, where is the monitoring? Are there any penalties? If somebody says, "Yes, I don't have a transition plan. If you think I am going to explain to you my business plan and why I don't have one, that is your problem," then what happens? Is it your Department in the Treasury? Is it your Department in DESNZ? I am still not used to this one. Who is going to come down on them like a ton of bricks and say, "You jolly well ought to"? Is it a wagging of finger penalty or is there an actual penalty?

**Baroness Penn:** I think it is for the shareholders in the business to hold the business accountable for what their plan is to meet their net zero

targets. We should not view transition plans in isolation. We have articulated government policy to deliver on net zero, and that will involve a series of regulatory changes and other changes that will change the operating environment for different businesses, so they will need to comply with those regulations. That is why having their own transition plans is also important for shareholders to see that they have credibility there.

We should not misunderstand the role of the transition plan. Government have set their own targets for delivering net zero and will have policies, regulations and public financing to help drive that. We also need private financing to align with that and help drive that, and we need firms to articulate what their plans are to deliver that.

On what the stick is, on disclosure the FCA is the regulator for the asset owners, the asset managers and the publicly listed companies; we are launching a consultation later this year for other large companies throughout the economy, but that is about articulating your transition plan. Then it is for the company's investors to look at the credibility of those plans.

**Q191 Barry Gardiner:** If one company's investors happen to be gung-ho climate deniers, what will happen to that company?

**Baroness Penn:** I think as we move towards transitioning to net zero, with government policy and regulation and international regulation also, the operating environment for that company will become more and more difficult.

**Q192 Barry Gardiner:** That is what I am asking you. Surely that is exactly the point. I want to know what does "mandatory" mean? When you get there, eventually, what does it mean? What is the penalty if you do not comply, if you do not produce that transition pathway?

**Lord Callanan:** Ultimately the market will drive companies towards doing that. You are starting to see that now. If your company is not on track, you have difficulty in accessing finance. A lot of financial institutions are interested in seeing this information and your shareholders will be increasingly concerned. If you are not taking account of the reality in which your firm operates, ultimately in a market you will go out of business. That is the ultimate sanction that you have.

**Q193 Barry Gardiner:** I agree with you. I recognise the market is moving in that way. I recognise that public opinion is moving in that way, and thank goodness, but we do not have time for the laggards in the market to comply. Therefore, if you are going to say that we are making this mandatory, we need to know what Government are going to do to those companies that fail to comply.

**Fayyaz Muneer:** I think it is worth being clear about what we are making mandatory. We are making disclosure of the transition plan mandatory. What does that mean? At the point at which the TPT standard



gets into regulation—of course that is subject to the finalisation of it—if you have a transition plan to that standard and you publish it, you have complied. If you do not, you have to explain to your shareholders, the market, the people who will give you a hard time, your share price and so on. If you fail to do either of those, that is a failure to abide by your disclosure rules, and the FCA, in the financial sector at least, has enforcement powers over firms to make sure they disclose things. That is not just in sustainability, that is across the board, prospectus, all these sorts of things.

I think it speaks to the role of financial regulation, which is to enable scrutiny by investors rather than to direct investment itself. That is not what financial regulation is necessarily for.

Q194 **Barry Gardiner:** What legitimately counts as explaining? If as a company I say, “I do not believe in climate change, I think it is a load of cobblers. It is a global conspiracy and therefore it would be stupid to waste our shareholders’ time and money on preparing a transition plan,” is that an explanation as to why you have not complied?

**Baroness Penn:** It is an explanation and it is for the market to determine whether that is a credible explanation. I would say that it is not a credible explanation and also, by the direction that we have seen financial flows and how much is going into green and sustainable finance and the desire to move towards labelling investment as green or sustainable, which we will also be looking to regulate, that it is not a credible explanation. Then the market forces will respond to that.

**Barry Gardiner:** You hope.

**Lord Callanan:** In such circumstances it is probably quite likely that that particular company will want to go and list elsewhere in the world where they are not forced to produce these plans. At the end of the day it is an internationally competitive environment. We want to push and persuade and cajole companies along this road, but we do have to be careful of the fact that they have a choice as to where they list and where they conduct their business.

**Amy Jenkins:** I think it is also important to view the transition plans alongside other requirements underneath the sustainability disclosures requirements. We have also in the past year brought in, for the largest companies in the UK, requirements under the Companies Act to disclose their climate-related financial risks. Those obviously apply to physical risks from changing climate but also risk in the transition that we will see in Government policy. That applies to companies that have more than 500 employees, an annual turnover of more than £500 million. They are then required to put into the public domain in their annual accounts how they view their risk. Any sort of explanation not to do a transition plan would obviously have to be viewed alongside those other mandatory requirements as well.



Q195 **Barry Gardiner:** That is helpful, thank you very much. In the Green Finance Strategy, you have indicated that the Transition Plan Taskforce wants to align its planning guidance with the International Sustainability Standards Board and with GFANZ, the Glasgow Financial Alliance for Net Zero. How closely will those sets of guidance be aligned? In what ways do you propose to make sure they are?

**Baroness Penn:** The final ISSB standard, for example, is still under development. I think we are expecting it to be launched in around June this year, but there are drafts and iterations of it that are being used by the Transition Plan Taskforce as they develop their guidance at the same time. On the alignment with others such as GFANZ, GFANZ are part of the Transition Plan Taskforce, so they are involved in our work also.

An element of what the taskforce is doing is a lot of international engagement through forums such as the G20 and others, to also socialise our approach with other jurisdictions that are looking at transition planning, to ensure consistency there too. We also set out our approach in the Green Finance Strategy about how we will look to assess and endorse the IFRS sustainability disclosure standards. That is the standard issued by the ISSB. As that comes out in June, we will set out our plans for assessing that and integrating that within the UK standards over the next year.

Q196 **Barry Gardiner:** I understand a lot work has been done on trying to assess this locomotive in motion, if you like. What points of divergence do you think are emerging?

**Baroness Penn:** I do not think that there are particular points of divergence. The challenge can be of articulating approaches or standards where there are not international ones currently. Where there are international standards, we are seeking to align with them, and I think that is quite consistent; but there are areas and aspects, for example, of transition plans, where there is not an international standard to align with. We are trying to be conscious in how we develop our work that it has international applicability, but there may not be existing standards out there. The flipside is that our hope or our work will be that the TPT could form the basis in some way for developing further international standards if we are conscious of that as we develop it.

Q197 **Barry Gardiner:** To go back to the issue that Caroline Lucas raised about clarity, do you think that when the Government are saying, "We want to be a net zero financial centre, this is critical. On the other hand, we should be prioritising energy security," that mixed message to the market is a problem?

**Baroness Penn:** I think Martin answered that we do not think it is a mixed message.

**Lord Callanan:** I do not think it is a mixed message. Energy security is clearly critically important, but that energy security, to use the title of our publication before the recess, is "Powering Up Britain" from Britain. The



best way that we can ensure energy security is to have our own domestic sources of energy. Traditionally we have had that of course in the North Sea; that is now a declining asset and, therefore, we need to replace it. We are doing that. Obviously there have been discussions and arguments about the scale of the transition but we are rolling out renewables and that will power Britain from Britain, power generated in the UK, and that will help to ensure our energy security. Part of the goal of the strategy is to make sure that we get the massive sums of investment that we need in all of these new technologies into the UK.

**Q198 Barry Gardiner:** It will not do that in the short term, which is the excuse of Ukraine that has been used for the push for development. It is not going to do it in the short term and in the long term they will become stranded assets, but that is an argument maybe for another day.

**Lord Callanan:** With respect, we are doing that. We have £20 billion of investment a year going into these sectors. We need to ramp that up, but it is a work in progress.

**Baroness Penn:** One of the things that we have heard from investors, and I think it may have been reflected in the remarks from HSBC referenced earlier, is a need for greater detail and granularity of the transition pathways for different sectors to allow greater investment in those. We have published some sector pathways already and the Green Finance Strategy commits us to publishing further sector pathways.

**Lord Callanan:** Investor road maps.

**Baroness Penn:** Investor road maps to aid that investment and provide that clarity.

**Q199 Barry Gardiner:** I want to move on the questions on the UK as a global financial centre. We have received evidence that has underlined our standing as a leader in the whole area of green finance, but it has highlighted a need for greater collaboration across jurisdictions. The strategy outlines some high-level objectives for that collaboration, summarises a great deal of work that is already under way with emerging and developing countries. What I want to press you on is what specific targets you have set for international collaboration.

**Baroness Penn:** Perhaps it is worth taking a number of areas that we are looking to shore up and develop further over the next few years. First, is on the IFRS ISSB standards, the international standards that have been built out of the TCFD framework to provide a global baseline for sustainability reporting. We are looking to not only implement those standards ourselves but get global support for that.

Moving on from that, we are supporting the work of the Taskforce on Nature-related Financial Disclosures. This is a pivotal year for that because it will be publishing its final framework in September. We want to reach a global consensus on nature-related disclosures too. The third area of focus is making the case for increased ambition on net zero

transition plans and also thinking about standards for disclosure of those plans.

They are a number of areas of focus for our work, Where we are seeking to influence and articulate is across the board but to name a few, we are a leading member of the Coalition of Finance Ministers for Climate Action, and we lead the workstream on private finance mobilisation there. We are also keen to support ambitious global agreements on green finance through the G7 and the G20, including the G20 Sustainable Finance Working Group.

**Chair:** Make this your last question, Barry, could you?

Q200 **Barry Gardiner:** Yes, I will. I want to focus on the Green Finance Strategy indicating an aim of strengthening international consensus around a global carbon market. The Government have said they support Canada's global pricing challenge, so where do you see this going? How do you see it related to the trade-off between an emissions trading system and a global carbon price? How will this be taken into account in the whole of the transition?

**Lord Callanan:** The UK is proud to have been a pioneer in the use of market mechanisms to mobilise finance for climate and nature since 2002, when we established the first emissions trading scheme. Today the goal of the UK ETS is to make it the first net zero consistent cap in trade market. Internationally, of course, we have our aid budget through our voluntary carbon market initiatives, and at the UN climate negotiations are working to build credible global carbon trading systems; we must make sure that they are rooted in environmental integrity.

We are very proud of our international climate finance, of course, the £11.6 billion that we have committed to it. We are providing £130 million of that to support more ambitious carbon pricing and we are always working internationally to look at how we can link our—

Q201 **Barry Gardiner:** Our trading scheme applies only to emissions from goods produced in the UK; it is not associated with goods consumed in the UK. That of course can lead to carbon leakage, so what proposals do you have to combat that?

**Lord Callanan:** It is a difficult area. Both we and the EU, of course, are looking at the possibility of introducing CBAMs, carbon border adjustment mechanisms. It is a difficult area. It is becoming more international-focused now with America introducing the IRA and various EU subsidy initiatives as well. I think in the short term it is better to work internationally with other countries, to persuade them of the case for introducing carbon pricing in their own areas, but it is certainly something that we keep under review. We should not shy away from the challenges that it presents in a free trading international environment and our international commitments.

**Chair:** Barry, thanks very much. I am sorry you have had nearly half an

hour, and we only have half an hour left. Colleagues need to keep their questions to six minutes each now, please.

Q202 **Claudia Webbe:** On disclosure and reporting of climate and sustainability information from companies, the Green Finance Strategy commits the Government to consulting on and developing several types of metrics and reporting mechanisms. Among those listed are the international sustainability standards, the sustainability disclosure requirements, scope 3 greenhouse gas emissions reporting, adaptation, metrics and the green taxonomy. Could you outline how the timescales for these will align?

**Baroness Penn:** You have picked up on a number of different streams of work. Some of them will come under the sustainability disclosure requirements and that will be the framework that we will put in place for firms to disclose various elements of their sustainability.

Q203 **Claudia Webbe:** Which of those will not come under disclosure for sustainability?

**Baroness Penn:** For example, we are looking to incorporate the ISSB standard into the process for reporting against your climate-related risk. That is transforming one standard that exists into another. Green taxonomy may form part of sustainability disclosure requirements. We are consulting on the UK's approach to green taxonomy later this year, so that is another element of it.

The disclosure of energy use and greenhouse gases that has been required by UK businesses since 2013 currently includes scope 1 and scope 2 emissions but does not at the moment include scope 3 emissions. We are looking to consult on expanding or looking at what scope 3 emission reporting would look like.

You picked up on a number of different aspects of work at different phases of maturity. SDR is the framework by which we intend to move these disclosures into a more mandatory framework for reporting over time, but it depends on the maturity of those different aspects of work.

ISSB is most advanced and that standard comes out in June. Then we have set out in the Green Finance Strategy how we plan to assess and incorporate in that. On green taxonomy, we have set out our plans to pursue a UK green taxonomy and to consult on that in Q3, later this year. On scope 3 emissions, I think we are also planning to launch a call for evidence on scope 3 emissions reporting in Q3, later this year. I think you asked about the timeframes and that sets out some of the timeframes on those pieces of work. You also asked about the work on adaptation and I will have to check the timeframe on that, whether it is later this year or next year.

**Fayyaz Muneer:** I can come in on adaptation briefly because I see you want to ask another question. The NAP3 is the national adaption plan that will be republished this summer, I believe. That is a DEFRA lead. Then we



said that we would come back to an adaptation framework more broadly next year as well.

Q204 **Claudia Webbe:** To be clear, which of these measures, if any, will be mandatory for companies to disclose?

**Baroness Penn:** ISSB, as we assess and look to incorporate it into our UK standards, will be mandatory. We also already have mandatory disclosure against TCFD, and that is what that will build on. We have said that disclosure against green taxonomy, once it is developed, would be voluntary for two years at least to look at how that is working before our intention to move towards mandatory. I think on scope 3, we are at an earlier stage of the work, so that is a call for evidence to look at how scope 3 emissions could or should be reported. We have not articulated at this stage what the outcome of that work will be because we are at an earlier stage of it.

Q205 **Claudia Webbe:** What do you see are the risks for making some or all of these mandatory? You are outlining some of these disclosures are voluntary. Where do you see the risks?

**Baroness Penn:** I might flip that the other way around, which is that to move towards mandatory disclosures in some of these areas we need to make sure that we have the data, the frameworks and the information that those companies would need to draw on to be able to make those disclosures. We will want in some areas to have maybe some international standards for those disclosures.

The thing that we always think about when looking at how we build up this framework of disclosure is what information is useful to disclose and that can be disclosed in a useable format to allow investors to make decisions. Also over time those decisions lead to the alignment of financial flows with our net zero and nature targets.

Q206 **Claudia Webbe:** Let me ask the final question, because we are running out of time fast. The Green Finance Strategy highlights the importance of harmonising disclosure requirements across jurisdictions. Yet the Government are to review, as you have indicated, the International Sustainability Standards Board to establish whether they will be suitable for adoption in the UK. Perhaps you have just clarified that. If the Government judge these international standards to be unsuitable for adoption here, what effect will that have on harmonising requirements across jurisdictions?

**Baroness Penn:** We have worked very closely in the development of the ISSB standards. We think it is very likely, therefore, that our assessment process will conclude that those standards are suitable and usable within the UK context, and we will move towards incorporating them. We have also worked hard to get international support for those standards and we hope and expect to see other jurisdictions that have TCFD reporting move towards reporting against the ISSB standard. The purpose for the



development of the ISSB standard is to have an international standard that will harmonise reporting.

We can take that forward within the UK and we can work internationally to advocate for others to take it forward in their jurisdictions, but we cannot mandate the other jurisdictions to take that forward.

Q207 **Claudia Webbe:** Why do we view it as being suitable for adoption here?

**Baroness Penn:** We do not yet have the final standard and we need to see what it looks like before we do, but when we have that standard, we can review it. As I say, we have input into the development of the standard, so we are very confident that it will allow us or encourage the disclosure of decision-useful information for investors.

**Fayyaz Muneer:** That is all entirely right. The only thing to add, and I will make it quick, is the standard way to assess and adopt any standards from the IFRS, whether it is just standard financial reporting, accountancy or whatever, is to assess and adopt the IFRS for all of the things they produce, like global standards and global baselines. They always require a bit of adaptation to local context. As the Minister said, the odds of the ISSB sustainability standard being entirely unsuitable for the UK are low, because we have been engaged with it very closely and it is built out of TCFD, which we have already got in as regulatory. It is just standard practice to have an assessment process for IFRS standards. That will be led by the Department for Business and Trade, and we set out in the strategy what that process would look like.

**Claudia Webbe:** I am going to end the questions there, but could we ask Baroness Penn and Lord Callanan if they could share with us how they are going to avoid greenwashing?

Q208 **Chair:** That comes into my next set of questions so I will pick that up directly. The whole issue of the taxonomy, which you touched on a bit earlier, Baroness Penn, is obviously critical for providing the ability for both companies to report in a consistent way and for investors and others to have confidence in what is being disclosed and what is being said. We have had a delay in the taxonomy—the results of the technical advisory group, which was set up two years ago, with a view to making it a statutory response for UK taxonomy by the end of last year. That was deferred by you in the Financial Services and Markets Bill, I think, Baroness Penn. I presume that was Covid-related. You are now not launching the consultation until this autumn. Can you indicate what timetable you are now working to on getting this critical issue resolved?

**Baroness Penn:** You are absolutely right that there was an original commitment to implement aspects of a green taxonomy by the end of last year. That was based on following extremely closely the EU's approach to a green taxonomy. In looking at the implementation of the EU's green taxonomy, we saw some very practical difficulties in how it was being framed and implemented and we wanted to take the time to



be able to learn the lessons from that and get it right in the UK. That is why we have taken a little bit more time on our approach.

In the Green Finance Strategy, we say that we expect to consult in autumn this year, that consultation would run for the normal timeframe and then, as soon as possible after that, we will look to publish a final approach to the taxonomy and set out how we expect companies and others to report against it.

The other aspect that we have set out is that we would look in the longer term at maintaining our ambition for mandatory disclosures against the taxonomy but having a period of two years to look at how that taxonomy works before moving towards that mandatory process.

Q209 **Chair:** Will the Green Technical Advisory Group have its mandate extended because that ends next month? They are your advisers on this subject.

**Baroness Penn:** Yes. The GTAG has already provided valuable resource to us in developing our work on green taxonomy and we will continue to work closely with it until its remit ends.

Q210 **Chair:** It ends next month. Are you going to extend it?

**Baroness Penn:** Yes, indeed. Well, it has managed to produce a huge amount of work that has informed our process, for example—

Q211 **Chair:** Your consultation is not starting until autumn so presumably, if you want it to continue to provide advice, it needs to be able to do that through the consultation.

**Baroness Penn:** It will and has been able to provide a series of pieces of advice that will inform that consultation.

Q212 **Chair:** I am taking that to be a no, you are not going to extend its remit.

**Baroness Penn:** I think you could take that as meaning that its current remit ends in June this year and no decision has been made.

Q213 **Chair:** Can I encourage you that it might make sense for it to have its remit extended so that it can advise you on the outcome of the consultation? I am sure you might find what it has to say of value if you have found its current advice valuable. I am conscious that we have very little time so I am pressing for some actual answers rather than obfuscation, without being disparaging.

One of the issues that has come out of the EU discussions, as you have said and we have had evidence of this, is that the EU outcome through its taxonomy is that an issue is regarded as binary. It is either green or it is not green and we have had evidence that there should be some kind of gradation. Biomass is quite a good example: it was initially thought of as a green source of energy and is now being thought of as a polluting source of energy, so things change over time. Will the UK taxonomy consultation seek advice on whether we should have a more graduated



methodology for determining how green an issue is?

**Baroness Penn:** That is certainly something that we will want to consider. The Green Technical Advisory Group that you just referred to, Chair, is producing advice for the Government around, for example, a transition taxonomy. I think there is a trade-off between the simplicity of use of a taxonomy and its ability to account for transition or other gradations of green. We will want to think about how the taxonomy fits in as a tool to prevent and guard against greenwashing and promote green investment versus the other tools that we also have in our toolkit.

Q214 **Chair:** Thank you. I attended the launch event yesterday by TheCityUK and ICE of a very interesting report on global carbon pricing mechanisms and the marketplace, and I commend it to your officials. I will leave you with a summary of the document. It is very clear that the marketplace for carbon pricing and the tax remedies available through ETS and other schemes—I think there are 36 schemes now operating around the world—is growing at incredibly rapid rates after a very slow start. All of these markets are dependent on certainty but precisely to the point that my colleague Claudia made earlier about the validity of the measurements and the metrics being used, which is what the taxonomy is designed to achieve. This is a pressing and urgent issue. Can you give the Committee any intent as to when you expect to have resolved your deliberations and established what the UK taxonomy will look like?

**Baroness Penn:** As I said before, we intend to consult in the autumn and that will run for the normal period. As soon as possible after that we expect to publish our final approach.

Q215 **Chair:** You are not going to give us a date but can we assume it is during next year?

**Baroness Penn:** I think that is a sensible timeframe.

Q216 **Chair:** We will be making some recommendations and I am sure we will give you some views about that but it would certainly appear to me to be an increasingly urgent issue so that we avoid false markets being created.

**Baroness Penn:** You are right that taxonomy is a part of that. There is a number of different tools that look at protecting against greenwashing. For example, the FCA is consulting on its funds labelling regime at the moment. I completely agree about the importance of guarding against greenwashing. Green taxonomy is one tool. We have others too that we are taking forward.

Q217 **Chair:** It is complex because there is a definition in the EU taxonomy, the US will have its own version. It is about trying to find the ability to navigate so that global entities are not having to have one instrument classified in a way that conflicts with another jurisdiction. Is that being taken into account as part of the consultation?



**Baroness Penn:** Very much so and I think that is exactly one of the aspects that we want to take the time to get right. The reality on green taxonomies versus other areas where we are seeking a single international standard is that the outcome will not be a single taxonomy or standard. We need to think about how we design ours to minimise burdens while delivering the right outcome.

Q218 **Claudia Webbe:** On investment, in the Green Finance Strategy the Government say that they will use government and other public levers to mobilise private investment in green finance. The strategy lists a great many levers that are already in play. What will you do to ramp up private investment by that? Will you introduce new levers or pull harder on existing ones?

**Lord Callanan:** As we have set out and I mentioned in my introduction, we have a whole series of levers. Some of it, of course, is seedcorn financing. We have started to invest in an early stage of hydrogen development through capital investment, through revenue support models. We are investing in carbon capture, usage and storage, as I mentioned. In addition to that, we see using a viable business model, setting a long-term regulatory environment that investors can rely on, as being essential to bring in the investment that we need.

Q219 **Claudia Webbe:** What are you doing to ramp up more private investment? I get that you have existing levers but what more are you going to do?

**Lord Callanan:** They are the levers that we will use. We cannot promise to have any more money available unless the Treasury is being particularly generous, so the idea is to use the financing that we have to its maximum effect and providing long-term certainty for the investors.

Q220 **Claudia Webbe:** You do not have plans to introduce any new levers?

**Baroness Penn:** I think a good example of this is carbon capture, usage and storage where we had a commitment to capital investment in the short term, but at the Budget just gone we have also committed to I think it is £20 billion over the long term. That allows the developers of that technology to create a revenue model that can also mean they can attract the private investment they need to get that going. That is an example of how we can use government certainty and commitment to investment to also attract private investment. That commitment to £20 billion was new at the Budget in March this year. That is just one example but I think it is a good one to the point about ramping up.

**Lord Callanan:** Another example is the investment in the UK Infrastructure Bank, building its capability and capacity. It has already announced 15 deals investing approximately £1.4 billion, which will unlock over £6 billion of private capital. There is a number of different levers and policies for financing that we can use.

Q221 **Claudia Webbe:** What targets have you set for private investment in

green finance?

**Baroness Penn:** We have not set specific targets for this, but we have set out in the Green Finance Strategy how we will monitor the alignment of financial flows with our net zero target so that we can see whether private financial flows and overall investment flows are helping us to deliver our strategy. I think we have commissioned two pieces of research to scope existing investment tracking methodologies and look at data sources to allow us to take forward the work of monitoring whether financial flows are flowing sufficiently to help us meet our targets.

**Lord Callanan:** If I could give you some figures, across 2021 and 2022 alone, £50 billion of new investments were delivered in low carbon sectors in the UK. That is economy-wide, ranging from renewables to energy storage, carbon capture and storage, electrified transport and so on.

Q222 **Claudia Webbe:** I say all of this in the context that we are talking about the necessity to reach £50 billion if we are going to tackle this issue. The Government have published several sector-specific net zero investment road maps and has committed to publishing more but so far the only sector where an investment road map is planned for is heat pumps. What other sectors are you considering for investment road maps and when do you plan to publish additional road maps?

**Lord Callanan:** We already have, as I mentioned, a number of road maps. We have one on offshore wind; we do have heat pumps, but we also have CCUS and hydrogen. We expect to produce future road maps in nature, nuclear, heat networks, automotive EV and transport.

Q223 **Claudia Webbe:** Have you published those?

**Lord Callanan:** We have published the first ones that I mentioned. It is not just heat pumps; it is also offshore wind, CCUS and hydrogen, but we have future plans to publish nature, nuclear, heat networks, automotive EV and transport.

Q224 **Claudia Webbe:** Could you write to the Committee and give us that publication timetable? Is that possible?

**Lord Callanan:** We can give you copies of the ones we have already published and we can give you a timetable for the ones that we are going to publish.

Q225 **Claudia Webbe:** Thank you. Some stakeholders have called on the Government to issue an overarching, economy-wide UK net zero investment plan. What consideration have you given to producing one?

**Lord Callanan:** I am not quite sure what you mean by that. We have produced a number. Lots of the different sectors need to be looked at individually. We could add up the different requirements in every sector to produce an overall plan, but clearly for individual investors the



important thing is to focus on their particular areas of the economy. That is what they are interested in.

Q226 **Claudia Webbe:** Basically, no is your response to that. You are not planning to do an overarching, UK-wide net zero investment plan?

**Amy Jenkins:** What we set out alongside the Green Finance Strategy are the various investment road maps that the Minister has just run through, but it also sits alongside Powering Up Britain and the detail that was set out there in the particular policies or regulations for funding that were serving to make particular sectors like carbon capture investable. Of course, alongside officials from the Department for Business and Trade and the Office for Investment, we continuously engage with investors to understand whether that is making these kind of sectors investable and we will see the sums and levels of investment required mobilising into the UK. We responded to the Skidmore recommendation in this space as part of Powering Up Britain and the particular sort of list that was given in the Skidmore recommendations, but our response is that we have Powering Up Britain alongside the Green Finance Strategy three respective investment road maps and together they comprise the investment plan that was asked for.

Q227 **Claudia Webbe:** In the Green Finance Strategy, the Government have signalled its intention to explore blended finance models. How do you expect these to work and when might they be up and running? Will they target particular moments in a product's lifecycle?

**Baroness Penn:** There is a number of different potential models, depending on the sector. Lord Callanan mentioned the UK Infrastructure Bank. That is looking to blend public money with private investment on a whole range of projects and it has set out its priorities, but then in different sectors there will also be plans taken forward.

**Amy Jenkins:** In reality, the Government already support a variety of blended finance approaches. We list a few in the Green Finance Strategy. We refer to the fact that we have the Big Nature Impact Fund, which is being led by DEFRA and, as Baroness Penn mentioned already, the UK Infrastructure Bank, which has £22 billion of financial capacity, which is starting up over time. So far it has made the 15 deals that Lord Callanan mentioned, using a variety of blended public and private approaches. They have cornerstoned a variety of funds already. Alongside the Green Finance Strategy, they announced that they were setting up two equity funds to look at long-term electricity storage.

Together with Government looking at this in more detail with the Green Finance Institute in advance of the next spending review, alongside the UK Infrastructure Bank, we already have a variety of these kind of mechanisms. We are looking at that in the round in ramping up investment, as you asked before.

Q228 **John McNally:** My questions are basically on nature and biodiversity.



The Taskforce on Nature-related Financial Disclosures framework, which we have been hearing a lot about, is due to be published in September this year and the Government are committed to exploring how that overarching, underpinning, robust framework of a policy can be incorporated into UK policy and legislation. What lessons have you learned from the Government's experience of incorporating the Taskforce on Climate-related Financial Disclosures into UK policy and legislation for this future framework? To keep things moving on, do the Government plan to mandate TNFD-aligned reporting more quickly than they did for the TCFD?

**Baroness Penn:** I think you are right that there is a lot that we can learn about our experience with implementing TCFD for the TNFD framework when it is published. We have committed to explore how best we should incorporate it into our policy and legislative architecture. One of the things that we have learnt from TCFD is the benefit and importance of translating that into an international standard through the ISSB. We would look to welcome and encourage that in the development of TNFD so that there is a global baseline for sustainability reporting. Once that standard is out, we will look at how best we can incorporate it into our disclosure framework. We see that as key to delivering target 15 of the global biodiversity framework agreed in Montreal.

Q229 **John McNally:** Does anybody else want to add to that?

**Lord Callanan:** As my colleague has said, we see it as critically important, obviously taken forward by DEFRA but it is seeking to develop a clear user-friendly risk management importing framework on nature-related risks, impacts and dependencies. The aim is to put forward a common language and approach that firms and regulators can draw on in analysing their own nature-related risks and impacts.

**Baroness Penn:** You asked about the lessons from TCFD. I met those leading the TNFD process when I was in Montreal for the CBD COP. They said to me that they are being very open and collaborative in how they are developing the standard, and they are road testing it as they go along. The feedback is that nature is more complex to disclose against than climate, but we also need to move faster. It took seven years, I think, for TCFD to be developed, agreed and implemented. We recognise we need to move faster with TNFD, so testing and learning as that standard is developed is an important way of ensuring or encouraging quick adoption when it is produced.

Q230 **John McNally:** There is a lot to be learned and I understand you need to get this right. It is so important to get this right because, as my colleague said earlier, we are not going to get a second bite at this. It will happen to us sooner rather than later and we don't want to be in a position two or three years from now saying that we should have done this and we should have done that. We need to get this absolutely spot on. On that point, do you have any plans to include nature or biodiversity loss in your consultation on the transition plan that is taking place?



**Baroness Penn:** Yes. As part of the Transition Plan Taskforce we have set up a nature working group to look at how nature considerations can be incorporated into the transition plan guidance and any supplementary guidance that should be made available to firms. We have set up a specific workstream thinking about that.

Q231 **John McNally:** Who does that reach out to when you are doing that? Who do you get to?

**Baroness Penn:** It is chaired by the WWF and maybe others but they then reach out to the network that we have in the TPT, which includes businesses that might have to disclose, users of transition plans, academics, NGOs and others to try to have a broad church inputting into that guidance.

Q232 **Chair:** Can I pick up on one comment about how this process will work for nature? Members of the Committee visited Wakehurst Place last week, part of the Royal Botanical Society's facility. We were talking about the project that DEFRA has funded to calculate the carbon that is locked up in trees, and we were told that they estimate that the best of all the different measurement methods currently used underestimates the amount of carbon in a mature tree by 30%. The variability of the measurement is enormous, as you have just indicated. To what extent is the Treasury helping DEFRA calculate the kind of metrics that will be necessary to provide financial instruments that people can have confidence in for carbon sequestration through nature?

**Baroness Penn:** We are working really closely with DEFRA. We already have the woodland and peatland codes that allow people to account for the carbon that can be locked up in those areas, but we also support further work to improve the understanding of those standards, which will be really important. Alongside the Green Finance Strategy, DEFRA published its nature markets framework, which is focused on all the different elements that we will need to have in place to have a thriving market for nature as we are building in carbon also.

Q233 **Chair:** Do you have any sense for when that will emerge?

**Baroness Penn:** The nature markets framework timetables?

**Chair:** Not the round table but the consequences of the round table.

**Baroness Penn:** I don't have the timings before me.

**Fayyaz Muneer:** Sorry, the timings for?

Q234 **Chair:** For reaching some conclusions on how we are going to measure nature or the carbon impact of nature issues. We have biodiversity net gain coming into law and in effect from November. I don't think there is clarity yet about how that will be measured. I do not think there is clarity about how Natural England approves nutrient neutrality mitigation measures because it does not have the proper metrics to do so. This is a



very complex area. I know that it does not fall within any of your direct responsibility, but it will lead to financial instruments and taxation, which do sit within your area.

**Zoe Norgate:** I can come in briefly on that. Yes, you are right, it is an area for DEFRA primarily but the Nature Markets framework was already published alongside the Green Finance Strategy. DEFRA is already doing work with the British Standards Institute to develop those methodologies and standards for carbon and other elements of biodiversity. We are planning to launch a consultation on the wider voluntary carbon markets where you need the verification of the methodologies and the appropriate regulation of those emission reductions coming from nature. That will take place in the second half of this year.

We have also been working very closely and we are instrumental in setting up the two bodies internationally that are looking at the integrity in voluntary carbon markets and are currently working through some of those methodological issues. There is a lot happening in that space. The VCMi and the ICVCM, the two bodies looking at voluntary carbon markets, either have already published some of their standards or are due to this year. We will be looking at those very closely to see how we incorporate those into the UK regulatory framework.

Q235 **Chair:** Can you give any kind of timetable for when it is likely to reach some conclusions?

**Zoe Norgate:** I think the current thinking on the consultation is it will launch in the second half of this year. The Government response will probably be in the early part of next year, but we will also, as the various external reports and standards codes are published, be reviewing them as they come out.

Q236 **Sir Christopher Chope:** Can I ask you about annexe B of the "Mobilising Green Investment" paper and particularly the key target under "Energy efficiency and low carbon heating" where it says that your key target is to reduce overall UK energy demand by 15% by 2030. What concerns me is that the Government keep on imposing these targets and to meet these targets they are talking about a lot more regulation of investors and consumers, but one of the key ingredients in this is the level of population. By 2030, on present net migration trends, we will have increased our population by another 10%. To what extent has the population increase of 10% or 1 million a year net migration been taken into account in producing these targets? Surely that is solely under the control of the Government and yet the Government seem to be divided as to whether or not they want to control net migration.

**Lord Callanan:** That is a wide range of questions, sir. If you will forgive me, I won't get into the migration issues. It is not within our responsibility as Departments but I can certainly talk about the energy efficiency target.

Q237 **Sir Christopher Chope:** Population is surely. If you are going to reduce

the amount of consumption of energy and you have 10% more people, that means that everybody else has to make a bigger sacrifice.

**Lord Callanan:** Partly true, but of course we can make the building stock that we have at the moment a lot more energy efficient, and new building stock that we build, certainly from 2025, will have much more energy efficient standards. The building regulations are being improved so that all new buildings from that point on will be very energy efficient with very low carbon emissions standards.

On energy efficiency generally, you mentioned the 15% target. We have set up an energy efficiency taskforce, which I co-chair along with Dame Alison Rose from NatWest, to produce a detailed implementation plan for how that could come about. It does not sound too optimistic but I can assure you it is a very detailed plan of work and quite difficult to achieve. It is certainly something we are working on. We are also working towards the heat and buildings strategy.

You are right to point out the difficulties in the UK. We have the oldest building stock in Europe, a product of the industrial revolution. We have 6 million buildings that were built before the first world war. It is a massive challenge but one that we need to take on and to put plans in place to deliver.

**Q238 Sir Christopher Chope:** What is the population assumption, the increase in population underlying all these targets?

**Amy Jenkins:** On the forecasts we make, "Powering Up Britain: Net Zero Growth Plan" reaffirmed our pathways within the net zero strategy, that those will be the pathways that Government are following. Those are set out and analysed, often drawing on work by the Climate Change Committee, that make assumptions about population growth. That is very much factored into an assessment of how our greenhouse gas emissions will grow and, therefore, the action that Government will need to take to meet their net zero target by 2050.

**Q239 Sir Christopher Chope:** What is that assumption about population growth between now and 2030?

**Amy Jenkins:** I don't know the assumption off the top of my head but I am sure we can write to the Committee on that.

**Q240 Sir Christopher Chope:** It seems to be changing daily. Can I also ask you about the way in which we evaluate the different investment strategies? One way of doing this is to look at carbon productivity, the amount of GDP produced per unit of carbon equivalent emitted. That was very much promoted by McKinsey in 2008 as a way of ensuring that the investments that we made would produce the biggest bang for the buck in reducing carbon. To what extent is carbon productivity taken into account or promoted by your Department and particularly in the context of local authorities? Local authorities are faced with a whole mass of different challenges and if they are going to evaluate whether they should



have a cycle lane or a charging point for vehicles or zero emission buses, it would be very useful if they had means of measuring the relative carbon productivity that could result from those different measures.

**Lord Callanan:** I am not sure about the carbon productivity. Maybe one of the officials can help on that. Certainly we work very closely with local authorities; they are one of our key delivery models. Virtually all of our energy efficiency financing, something like £6.6 billion over this Parliament, is delivered in partnership and through the medium of local authorities. On how they measure their individual carbon intensities, do the officials have any idea about that?

**Amy Jenkins:** The way that we have set out in our net zero strategy the pathways that various parts of the UK need to follow to meet net zero is done in close collaboration with the Climate Change Committee. It is based on deployment of the particular technologies that will replace fossil fuel equipment—for instance, how many electric vehicles we will need to see on the roads in replacement of internal combustion vehicles. That does not necessarily take into account carbon productivity. It is another metric that is definitely out there. It came up earlier in the conversation. In the Green Finance Strategy we make very clear that we will need an additional capital investment of around £50 billion to £60 billion per annum by the time we get to the last part of this decade.

We are in the process at the moment of looking at, and it appears in some of the investment road maps, mapping that out for particular sectors. For instance, we know the commitments we have made in lateral wind. That translates into an additional £50 billion of capital expenditure that will be required in cell deployment. At the moment the way that we understand the investment need is we are looking at the reductions that will be needed in greenhouse gas emissions translated into deployment, so there are particular carbon technologies translated into investments.

**Lord Callanan:** Baroness Penn can come back on the issue of carbon volatility.

**Baroness Penn:** The “Green Book” sets out the process for how central Government looks at the policies and programmes and projects that they do and assesses how well they deliver net zero. There is also supplementary guidance that was issued by the then Department that was BEIS to assess the impact of greenhouse gases using carbon values. All policies in central Government must consider material impacts on climate resilience and natural capital where relevant in line with that supplementary guidance. I don’t think it necessarily follows the exact methodology that you were talking about but we do have clear published methodology for how we assess policies, programmes and projects on how well they deliver against our net zero targets.

Q241 **Sir Christopher Chope:** The work that was done by McKinsey, which was of international repute in 2008, is headed up “The carbon productivity challenge: Curbing climate change and sustaining economic



growth". Are the Government committed to those two objectives together, sustaining economic growth as well as curbing climate change?

**Baroness Penn:** Absolutely, and I think our track record speaks for itself in that regard. I don't have the exact figures to hand but I think that we have been the fastest G7 economy to decarbonise while also having really strong growth rates. We have shown that we are able to do that in the past and it is definitely the plan for the future also.

**Chair:** Your last question, Chris, because we are running out of time.

Q242 **Sir Christopher Chope:** Yes, Chair. If you are a local authority and you are trying to work out whether it is better to have a charging point or a cycle lane or a zero emission bus, how do you go about measuring the relative value in reduced carbon from those different policy objectives unless there is a methodology for doing it? That methodology was set out and referred to in this McKinsey report. How can we help local authorities carry out such evaluations? They have an enormous responsibility in this and at the moment we are told that figures are coming out from the Government that you have to have this number of heat pumps, but who is going to afford those heat pumps? Will the local authorities be given the money to subsidise the heat pumps? All these different objectives and policies seem to be fighting against each other and there is no common theme running through, which in my submission should be centred on carbon reduction and productivity.

**Lord Callanan:** I do not agree that there is no common theme coming through it. That is why we have the various strategies and the one that you mention, the heat and buildings strategy, is the common theme that runs through all of our building decarbonisation policies.

To take your example of heat pumps, we have a target of installing 600,000 heat pumps per year by 2028. I can see Barry Gardiner looking very sceptical; obviously it will be a challenge. On subsidies for that, we have the boiler upgrade scheme, which was allocated £250 million over three years. That is up and running and you can get a subsidy of £5,000 for an air-source heat pump, £6,000 for a ground-source heat pump. It is fair to say that take-up has been low at the moment for a variety of factors and we are looking at how we can promote that scheme further, but of course there are additional heat pumps being installed by local authorities through mechanisms such as the Social Housing Decarbonisation Fund—we recently announced a record investment in that—home upgrade grants and so on.

Q243 **Sir Christopher Chope:** That is all very well but Citizens Advice has recently produced a report saying that only 16% of households can afford a heat pump without additional borrowing. Do you accept that? If so, how will you be able to deliver your heat pump programme without burdening the consumers with additional costs?

**Lord Callanan:** It is a challenge. That is why we have the financing scheme giving direct grant support. We wanted to make it as simplistic as



possible. We have the £50 million green finance accelerator to try to roll out green financing models such as green mortgages. We are currently working with the financial institutions to see how we can roll out more available finance. I totally accept that it is a challenge. It is a technology we are not particularly familiar with in the UK because we have had large amounts of gas available for years for the majority of our space heating. Heat pumps are much more prevalent in other parts of the continent. We are starting from a very low base in the UK, but if we are to achieve our goal of decarbonisation of building stock we need to move forward and electrification of heat and heat pumps are by far the most efficient way of doing that.

The other thing that we need to do, of course, is what is known as price rebalancing. Over time—and we will be issuing a consultation on this later in the year—we need to make electricity relatively cheaper compared to gas. That is not something that will happen instantaneously but there needs to be a financial incentive for people to electrify their heat, which is not so clear at the moment.

**Chair:** Thank you very much. You have been very generous with your time, Ministers, so I am going to call the session to a halt. Thank you.