



Building on the first [Pathways to Net Zero Series](#) in March 2022, [Pathways to Net Zero Series 2](#) in October 2022 sought to identify solutions to deliver emissions reductions at the scale and pace needed.

**Hasta La Vista, Carbon!** chaired by Stephen Glaister CBE, Emeritus Professor of Transport and Infrastructure at Imperial College London and Associate of the London School of Economics, focused on how we can develop solutions to the cost of living crisis that will accelerate the transition to net zero and enhance our energy security.

The background to the discussion was an increasingly challenging policy context. The Growth Plan 2022 published on 23<sup>rd</sup> September had made clear that growth was the new government’s central mission. A review was underway to ensure that net zero is pro-business and pro-growth. The Liz Truss government had ended the moratorium on fracking, given the green light for new oil and gas drilling and suspended green levies on energy bills.

However, in February 2022 the IPCC had issued their bleakest warning yet on climate impacts. Meanwhile the climate crisis had been joined by a major war, rising inflation, a food emergency, supply chain crises, and a widespread, deepening cost of living crisis driven largely by spiralling energy costs. Participants were invited to consider:

- How do we ensure that growth doesn’t come at the expense of tackling climate change? What will the government’s new priority mean for the levelling up agenda?
- How can we use pricing and the wider system of taxation, incentives and fiscal measures to accelerate the transition to net zero?
- How can we move away from short-term thinking and take a systemic long-term approach to tackling climate change?
- How can we ensure that net zero is at the heart of policy making?
- How can we maximize the role of energy demand reduction to tackle the climate, cost of living and energy security crises?

This paper sets out a detailed account of the discussion. Comments by participants are grouped under three main themes:

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## 1. Evolving policy context and implications for net zero agenda

- Recent developments
- Energy transition
- Targets
- Appraisal
- Public transport post Covid
- Freight as a whole system
- Importance of narrative

### Recent developments

**Steve Gooding, RAC Foundation** summarised the key events and developments that had occurred since the first Pathways to Net Zero series was held in March.

1. There had been the sad death of Queen Elizabeth II and accession of King Charles III, meaning potentially the loss of a large voice on climate change campaigning front.
2. There was the ongoing tragedy of the war in Ukraine with the destruction of a bridge and launch of attacks on Kiev itself over the weekend (8<sup>th</sup> 9<sup>th</sup> October). The serious impacts of the war in Ukraine on mainland Europe, especially of reduced gas imports from Russia particularly affecting Germany, were all impacting on the UK.
3. The ramifications of the above for supply of traditional fossil fuels. At the instigation of Saudi Arabia, the oil producing exporters had decided to limit oil production with aim of pushing barrel of oil price up. The result was a growing problem both with shortage of supply and upward pressure on price of fossil fuels.
4. Liz Truss and Kwasi Kwarteng's mini budget (23<sup>rd</sup> September). Their taking over as PM and Chancellor had coincided with huge pressure on household budgets, rising energy prices, steep inflation, debate on benefits. Their response was: "growth, growth, growth".
5. Chris Skidmore MP had been appointed by the BEIS Secretary to undertake a Net Zero Review "to ensure that delivering net zero target does not put undue pressure on businesses and individuals". The review does not question the ambition of net zero. However, the key question will be whether or not it supports the growth agenda.
6. The mini budget included measures to accelerate infrastructure spending which included 86 road schemes, around half of which were safety measures. These included the Lower Thames Crossing and Stone Henge Tunnel, the latter being totemic of cracking on with improving and adding capacity to road network even where there are constraints such as national heritage.

**The Chair Professor Stephen Glaister CBE** asked whether the push for growth was now more important than net zero. In response by way of analogy, **Gooding** referred to the wording on the inside front cover of the 2010 "Coalition Statement": "Let's be clear, everything we do plays second fiddle to paying down the deficit". Similarly, "net zero" – and indeed "levelling up" – would be playing second fiddle to a generalised push for growth. If the economy doesn't grow the government will not be able to balance the books.

It was noted that the Climate Change Committee (CCC) had already addressed the question of how to ensure that net zero "avoids undue burden on the economy". Moreover, that the Nick Stern Review in 2006 had made abundantly clear that the business case for acting was unequivocal: "if you don't act now the burden you face will be far worse".



**Gooding** suggested that given that the cost of living has become such a critical issue, it would be more difficult than ever for government to use price signals if it results in the burden on households becoming even worse, especially with rising energy prices.

However, there are things we can do which will help both growth and net zero agenda. For example, home insulation would deliver an immediate benefit. An increase in the cost of energy has made it much more worthwhile to insulate as the price signals point that way. It was also interesting to note that energy companies were talking about paying people not to use energy at peak times.

**The Chair** posed the question what will happen if and when oil price drops? He suggested that we should be thinking now about how we might step in and do something with the margins? Once people have got used to higher prices would there be the opportunity to introduce a policy to use that money?

**Leon Daniels, Chartered Institute of Logistics and Transport & UITP**, said he was deeply concerned about where we are going on government policy given the ongoing economic crisis. There probably won't be a Transport Bill which will make forming Great British Railways very difficult. Moreover, after 80% furlough and the energy price cap the public now assumes government can and will pay for everything.

**It was noted that we were experiencing a turbulent time politically.** There had also been considerable push back, by green groups, including many conservatives, against the government's proposal to get rid of EU environmental regulations by the end of next year.

**Stephen Joseph, University of Hertfordshire Smart Mobility Research Unit and Foundation of Integrated Transport** stressed that we should be talking to the opposition parties who have a very different approach to net zero. The political class as a whole should be the audience.

## Energy transition

**Philip Sellwood, CBE Chair, Zemo Partnership** stressed that delivering net zero will rely heavily on the private sector. In addition to the wider political class business is also a key audience. We need to enhance the power of the market and look at the opportunities presented by the drive to energy efficiency for jobs, levelling up, social cohesion and better health outcomes.

At its heart net zero is an energy transition. There is a massive opportunity in that for the private sector. **Sellwood** quoted the physicist Robert Ayers, who has said that "the economic system looking forward is essentially a system of transforming energy resources into energy products and services. This represents the most major economic transformation in the last 200 years."

Energy efficiency and energy demand reduction should be playing a much more central role. **Sellwood** questioned why there would be any resistance to a public information campaign on saving energy when it has been calculated that a £15 million campaign would deliver benefits of 65 times that in 18 months.

**Andy Eastlake, Zemo Partnership** argued that we missed a huge trick not implementing solar PV on houses in new builds as standard in the way we have required EV charging points. People with solar PV have a different relationship with energy. They are very aware of how much and when they use it.



**Eastlake** also stressed that while the pace of change of technologies is rapid it is not yet real to most people today. Only 2% are driving with plug-in cars for example. He argued that there is also a danger of designing for the edge cases. We should adopt the Pareto Principle and focus where we can make the most gains quickly. Rather than prioritising HGVs we should concentrate on LGVs.

**Eastlake** asked what have we learnt from the unintended consequences of promoting diesel? We need a different relationship with energy efficiency and transport is a good example. We have a strong focus on zero tailpipe which solves our air quality issues at the local level, but we are not embracing energy efficiency. He suggested that if we go down the hydrogen route, we are in danger of losing sight of energy efficiency.

## Targets

In his opening remarks, **Professor Phil Goodwin, Foundation of Integrated Transport** suggested that we are in the midst of five crises: climate, Brexit, Covid, energy and now a crisis of government itself which makes tackling all the other crises very difficult.

He argued that net zero by 2050 is not a sufficient target. Targets for 2030 are more decisive therefore the trajectory to 2025 is critical. “With every year that passes the short run becomes more important not less”.

Transport even before the current crisis was not on a trajectory consistent with climate policy. **Professor Goodwin** noted that this had already been explicitly accepted by DfT and CCC, but we don’t know how far we are from the target because DfT has not published the figures. He said that the Transport Decarbonisation Plan (TDP) as published was a good start, but “this month’s government” takes us further away from the necessary trajectory.

However, the political situation could change very rapidly. “Let’s not put road pricing back in the 10 years away box.” **The Chair** concurred that over the past six months road pricing had risen up the agenda and there should be the opportunity to make progress there on carbon reduction.

## Appraisal

**Professor Greg Marsden, University of Leeds ITS**, doubted that it would be possible to accelerate building for new road schemes in 18 months. He also suggested that we should “hold DfT’s feet to the fire” on the case for investment in a world where we have radically higher fuel prices and a cost of living crisis. We need to consider what the implications are for demand futures.

**Professor Goodwin** argued that doubling down on the roads programme does not make sense. The credibility of RIS2 and RIS3 is put in doubt by successful decarbonisation which requires reduction in traffic volumes. He argued that the current roads programme will neither deliver carbon reduction nor value for money.

**Chris Todd, Transport Action Network**, argued that need to challenge the ideology that road schemes *per se* are good and deliver growth: we need proof. Appraisal methodologies have been developed with road schemes in mind and based on small time savings, but we need to consider how and where can we deliver growth in a more efficient way. We need a vision of what we want to achieve: “vision and validate” rather than “predict and provide”.



**The Chair** stressed the importance of doing the sums properly and being clear about what we want to achieve with regards investment in road schemes. We should not assume every road scheme is bad and every public transport scheme is good. “Let’s do the sums properly!” He agreed that we must hold DfT to account on appraisal. Public capital funds will be very short indeed, so it is doubly important that money is spent on things that will work.

### Public transport post Covid

**Professor Marsden** argued that lower price cap for public transport experiments should be continued and supported, as they would help with cost of living crisis. How much are these schemes really costing? They seem to be bringing people back to bus which is something we need in the longer run. “Can we get the evidence out there quickly?” Gear Change and Active Travel England should also be seen as priorities and can be done quickly (although not strictly part of Liz Truss’s growth agenda)

**Todd** argued that we need to challenge more robustly the cuts that are happening to public transport. Cuts to services or frequencies are holding back the recovery from Covid. He also suggested that we need to change our approach to how we access services or consider ownership. “Do we need to own everything we travel by?”. If we swap out all the existing ICEs with EVs we will still face many of the same problems (although cleaner air) and will still require huge investment in energy infrastructure and upgrades with heavy burden on the public purse. Equally a lot of the manufacturing processes will be heavily carbonised.

**Julian Ware, Transport for London** said that London’s transport system is running at 80% pre Covid passenger levels, and this is despite the fact it has added Elizabeth Line so there is more capacity. The significant squeeze on resources available makes expansion of public transport and electrification of bus fleet difficult. Road user charging is the key leading option to raise revenue to fund public transport system but there is opposition to it.

20% fewer passengers means that TfL receives £1 billion less revenue. But at 80% journeys are more comfortable, there is a noticeable flattening of the peak, evenings are busier, and morning are less busy. **Ware** concluded that however challenging London’s transport problems may be, they are less difficult than its housing refit problems!

**Professor Marsden** argued that National Highways should address car occupancy levels and promote public transport so as to get better use of existing network. Similarly, **Joseph** argued that National Highways should measure throughput by people rather than vehicles. This would have a positive carbon impact and improve the efficiency of the road network.

### Freight as a whole system

**Ian Wainwright, Future City Logistics**, argued that there is a lack of understanding of how freight works as a system end to end.

The government’s Future of Freight strategy wants freight to be sustainable and net-zero, but this policy itself is out of touch with how freight works as a system end to end. Policies need to have a broader understanding of what it means for the whole sector to achieve net-zero, across the whole supply chain, rather than treating each step independently.

The result is lots of local authorities pushing for cargo bikes which might be good in the local area but without understanding the whole supply chain you don’t know what is happening in the first mile and we need to make sure we are decarbonising the whole journey.



Training, knowledge and upskilling of policy makers in local authorities is badly needed. The same sorts of solution for carbon are needed as for air quality:

- We can improve vehicles – make them cleaner and quieter.
- We can shift some journeys – e.g. deliver more overnight.
- We can avoid – e.g. do more on modal shift, land use planning, consolidation

**Wainwright** stressed the need for more public sector consolidation through procurement, and more sustainable disclosure requirements on businesses. And we need a level playing field on taxation of high street retailers versus online shopping retailers.

It's time for an honest conversation. We need to get rid of "free delivery" (it doesn't exist!). The market is broken on instant next day delivery, creating a demand and a need that wasn't even there in the first place. Smaller and smaller consignments are being bought online. The smaller the consignment the higher the carbon intensity of the freight.

### Importance of narrative

It was agreed that getting the narrative right is crucially important if we are to achieve net zero. This would be crucial for engaging business community and gaining public support.

**Daniels** argued that ultimately social issues need to come to the fore. Even though there was legislation, not smoking in public places and the mandatory wearing of seat belts didn't become normal until they became a social issue.

**Eastlake** argued that the narrative around the Net Zero Review sets the wrong tone, approaching net zero as if it is a burden. To say we are to review net zero to make sure it is not a burden is very different to saying how can we maximise the benefits.

**Hilary Chipping, SEMLEP** suggested that the detailed questions contained within the Net Zero Review call for evidence were rather more positive. How does net zero enable us to meet our economic growth 2.5% target? What opportunities does net zero offer your business?

**Joseph** stressed that it is important to recognise that beyond Westminster, businesses and the local and devolved authorities are doing a lot of exciting work on the net zero agenda, and we need to monitor, evaluate and celebrate that.

The other three nations of the UK are diverging away from England on transport and planning policy. Wales is asking what kind of roads investment do we need? Should we be building parallel cycle routes to trunk roads to allow for e-bike growth? The Northern Ireland government froze public transport fares. Scotland has a target to reduce traffic levels.

There are also some encouraging examples of exciting work being undertaken by English local authorities. Leeds has a target of moving to net zero even earlier than its Combined Authority. Cornwall in partnership with its Local Enterprise Partnership as part of the Local Growth Fund has received funding to reduce bus fares. Finally, **Joseph** noted that "buried in the TDP" is 'commute zero' and the objective of raising vehicle occupancy.



## 2 The vital role of business and the need for consistency of policy

- **Role of business and private finance**
- **Lack of policy certainty deters investment**
- **Importance of targets and good data**

### Role of business and private finance

**The Chair** noted that governments have a tendency to think that they must do everything themselves, but what they need to do is get the incentives right including the taxes right.

**Professor Marsden** emphasised that the role of business will be critical because there is not enough money in the private sector. For example, can local authorities work with businesses to deliver lower carbon travel to work? Weekday travel is still 6-7% below pre-pandemic and even more in the peak.

**Lauren Pamma, Green Finance Institute**, outlined how private sector finance solutions have an important role in spreading the upfront cost or through linking financial products to future energy savings and in sending demand signals to scale up supply of energy efficient measures. Some good examples already exist:

Salary sacrifice schemes for electric vehicles are an affordable way for company employees to access an EV. However, government benefit in kind rates are only out until 2025 so any employer looking to provide a four year car lease to their employees cannot guarantee how much it will cost them or their employee in tax and NI after the first 2 years which creates nervousness so we need that policy certainty to enable that product to continue.

On energy efficiency, Green Finance Institute is looking to bring in the private sector via property linked finance solutions. A financial instrument that allows homeowners to fund 100% of the upfront costs of home energy efficiency improvements linked to the property so that the repayment obligation transfers to the property so that homeowners can invest and still move. PACE, a scheme in the US, has supported \$10 billion investment into energy efficiency measures.

**The Chair** asked since there is clearly money to be made, why more of these opportunities are not taking off? In response **Pamma** said that the money is there to invest but there is a lack of understanding of what is out there. There is not the pipeline of products or customers to take advantage of. Importantly investors are not quite prepared to take the risk. "How can we use public money more smartly to de-risk that private sector investment? Could government grants be used as guarantees rather than loans to crowd in that investment?"

### Lack of policy certainty deters investment

Mixed messages from government on the direction of travel impacts private sector investor confidence and is another key reason for lack of investment, **Pamma** noted.

In the UK the lack of predictable and trustworthy consistent policy context for investment in net zero hinders schemes from taking off on their own. It was noted that the UK Infrastructure Bank would be a lending operation for government to make capital available to local authorities and others. **Pamma** said that it is still resourcing up. It is starting to make investments for public sectors and working out what guarantees would look like.



Germany, Italy, USA, and France all have major schemes in place delivering massive infrastructure development and investment, mainly led by the private sector and stimulated by the public sector. Such solutions are all available to the UK. Yet if we do not have a consistent and continuous policy framework, why would firms seek to upskill their workforce and other high-cost programmes if they cannot guarantee returns? **Sellwood** declared that we need to call this out! “We are just failing!”

The average time duration for a policy measure of energy efficiency in the UK is less than 18 months. “Why would any investor invest on that basis?” 5-to-10-year programmes are needed. There is currently a misalignment of investment cycles for business and timeframes for government policy. Until we can get better at alignment the necessary investment won’t happen. Renewables have been successful precisely because they have had that policy certainty, and investors have not been faced with a cliff edge.

### Importance of targets and good data

**Hilary Chipping, SEMLEP** said that SMEs will be critical to achieving net zero, because they make up such a high proportion of businesses. A recent survey for SEMLEP concluded that:

- 46% of businesses said they wanted to be more environmentally friendly
- 11% of businesses had a target
- 4% of businesses had set a date to meet that target

The intention is there, but what is needed is help with practical steps that can be taken. SEMLEP has used funding from government (Community Renewal Fund) to set up the “Green Recovery Investment Plan”. Businesses can apply for support (linking them to experts to help them with a plan for how they can get to net zero) and also small grants to do some things set out in their plan.

**Chipping** agreed with the Chair that it is incentives through pricing that will deliver, however politically difficult. But she stressed that we also need good data and good evidence in order to put the correct price incentives in place. A study in Milton Keynes funded by BEIS to find out how they can incentivise properties to be more energy efficient through council tax business rates, found that EPC data is not very good at identifying where we need to target.

On the subject of freight, **Chipping** suggested that if we can get the pricing right there can be advantages to efficiently delivering goods to our homes and the potential to save carbon by buying online. In response **Wainwright** referred to a study that showed when people bought online, they just used the car for other trips instead!

We need more strategic planning over a wider area, whereas government appears to be moving back to individual local authorities. **Chipping** referenced a study by the Energy Systems Catapult to find out how many local authorities are doing local area energy plans. Only 15 local authority districts have a plan in place. Many new builds are not being built in an energy efficient way.





### 3 Challenges and opportunities for engaging with the public

- **Cost of living crisis and support for net zero**
- **Net zero is a complex case to make**
- **Link net zero to air quality co-benefits**
- **Public attitudes to road pricing**
- **Personal carbon allowances**

#### Cost of living crisis and support for net zero

**Pamma** said that public support for net zero is still high despite the cost of living crisis, but people are worried about how they will afford it and there is a lack of understanding about the cost of the net zero transition and future impact on energy bills. **Eastlake** suggested that there is a silent majority of public support in principle for taking action on climate change, but people don't engage partly because they don't know how and partly because of other pressures.

**Pamma** stressed that the longer we put it off the more expensive it will become. She also noted that scrapping previous climate policies and slowing decarbonisation was estimated by Carbon Brief to have increased energy bills by £2.5 billion since 2013.

**Professor Marsden** noted that the cost of living crisis will impact on consumption and that will reduce carbon although not in a progressive way, but will at least buy some breathing space. Similarly, **Professor Goodwin** wondered whether there might be a silver lining. Energy prices, inflation, living costs and fall in real terms incomes will force people to find that they can make a level of behaviour change far more drastic and far swifter than they realised.

Ultimately, however, **Professor Marsden** argued that strong vocal public support for action will be critical to deliver the scale of change that will be needed. We need a rebirth of the public demand for action on climate change that we saw pre-Covid.

#### Net zero is a complex case to make

**Paul Campion, TRL** described it as a scale problem. "We are constantly flipping between an existential crisis and the need for personal action." Climate change is an inherently political problem because it is about how we change our own behaviours in the context of complex societies that are slow to change. It is a dichotomy. We can already see that change must happen because change has already started. There is no past state we can return to. To quote Gramsci: "The old world is dying, and the new world struggles to be born".

**Campion** argued that as technocrats our role is vitally important to come up with solutions, but just coming up with an answer doesn't solve the problem. We have to find stories, high level narratives that enable people to understand how they can live in the new world we can build. We can't just present technocratic solutions as self-evidently good and then be surprised when people don't go for them. He referred to a proposed road user charging scheme which would fund some very sensible local transport schemes in his area, but there is already a petition against it.

**Pamma** argued that decarbonisation is a complex case to make to the public. There is an upfront cost in transport and other sectors, including energy efficiency and retrofitting, but



EVs have lower fuel costs and energy efficient homes cost less to heat. She also noted that the media can be unhelpful and often gets things wrong. For example, the misquoting of an RAC report that said the cost of running an ICE and EV were broadly equal led to a 20% drop in views of EVs on Auto Trader.

**Pamma** cited a cartoon in The Telegraph of a candle held over electric car sale as particularly misleading when in reality vehicle to grid trials have shown that UK's fleet of EVs can act as an electricity load balancing device, feeding energy back into the grid at peak times and absorbing the supply when it's there. She noted that energy companies such as Octopus are looking to see how price levers can change behaviour. "We need more of that!"

### Link net zero to air quality co-benefits

**Andrea Lee, Client Earth** referred to UWE research revealing huge disparities on air quality affecting different groups. Poorest households own fewer cars, contribute least to problem but are most adversely affected and suffer the highest levels of air pollution. She referred to the case of nine-year-old Ella Kissi-Debrah, the first person officially to die of air pollution.

**The Chair** asked whether there is ever a conflict between measures to tackle air quality and net zero. **Lee** referred to the push for diesel on carbon grounds leading to increased air pollution. The CCC has shown that biomass used in domestic heating is not that great for net zero and from air quality perspective adds particulate matter.

There is a need to address air quality and net zero together and more comprehensively. Moreover, if we are looking for a narrative on net zero, we should link it to air pollution. The Royal College of Physicians has calculated £20 billion additional health costs. There is also a huge cost to the economy in terms of loss of working days, and impeding growth.

### Public attitudes to road pricing

**Michael Solomon Williams, Campaign for Better Transport** outlined the key findings from CBT research *Pay-as-you-drive: the British public's views on vehicle taxation reform*. Based on focus group research and polling of over 3,000 people, the research is the most in-depth analysis to date of public views on road pricing. Importantly described as "pay as you drive" rather than "road pricing", CBT found that:

- A majority of respondents agree there is a need to reform the current system of vehicle taxation
- Half support the idea of pay-as-you-drive, while only one in six oppose it
- Support for the reform increases as people engage with the arguments and options for implementation, showing that initial concerns can be overcome
- People understand the need for electric vehicles (EVs) to start paying tax like other vehicles (though at a lower rate), as the money lost in fuel duty needs to come from somewhere
- The ability to budget better as vehicle tax becomes more transparent also appealed to participants

The report proposes a national pay-as-you-drive scheme could progress from a pilot flat per-mile charge for EVs to replacing fuel duty and Vehicle Excise Duty with a smart charge variable by vehicle emissions and where and when the journey takes place.

The Chair applauded CBT for undertaking this research, noting that trying to find out what ordinary people think about road pricing is a very important question.



## Personal carbon allowances

**The Chair** said that rather than trying to reduce carbon by price one could introduce a form of carbon rationing, “carbon allowances would also get over the equity issue”. **Tony Duckenfield, Beyond Logic Consulting** said that he had previously developed proposals for a General Climate Levy, using price to encourage people to switch. However, recently he had also developed a short-term solution that could be implemented now:

“**Personal Carbon Reduction Planning**” (PCRP) builds on personal travel planning which was demonstrated to reduce car use by up to 10%. **Duckenfield** said that the same principles could be applied to carbon reduction. 83% people are concerned about climate change. That doesn’t mean they will do something about it but if you approach them, they will at least listen. He added that there were other reasons to act, and these should also be highlighted: reduced energy costs, improved health and wellbeing, air quality.

**The Chair** observed the scheme would need to include all carbon consumption, not just transport. **Duckenfield** agreed and noted that food is a huge carbon generator.

300 local authorities have declared climate emergencies. Companies could also take part, travel to work is one area where there is scope to reduce carbon footprint.

**PCRP** is a behaviour change approach, a harder solution would be to introduce a carbon levy or carbon allowances. There is the need for a short-, medium- and long-term plan. **PCRP** can be implemented now and would prepare the way for personal carbon allowances.

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## Closing comments by the Chair

*In closing the roundtable discussion, the Chair made an appeal for better leadership on net zero. There is also a need for better evidence. We must not rely on prejudice or fashion.*

*He questioned whether the levelling up agenda has fizzled out, now the government’s focus seems to be all on growth and productivity?*

*Government can’t do everything through direction. There is a tendency of governments to think they are required to do everything, but it is important that agency is placed in the hands of the market to provide the innovative solutions needed to accelerate the net zero transition.*

*Markets and pricing can be used to change course quickly, but we must also be very careful that the markets are giving the correct price signals and are correctly regulated to ensure we get the outcomes society wants.*

*There is a need for consistency over time and across jurisdictions (central, devolved, local) for business and investor confidence*

*Finally on personal carbon allowances, he concluded that if government can’t bear the idea that prices and taxes are what are going to guide what people do then we are left with rationing in some way.*