



## MINUTES

### NET ZERO ALL-PARTY PARLIAMENTARY GROUP

#### Scaling Up Net Zero Energy and Keeping Costs Down

#### How can we go further faster in an Energy Crisis?

17:00-18:45, Wednesday 20<sup>th</sup> April 2022

Boothroyd Room, Portcullis House, 1 Victoria Embankment, London SW1A 2JR

## PANELLISTS

- Rt Hon. Greg Hands MP, Minister of State for Business, Energy and Clean Growth
- Myles Allen, Professor of Geosystem Science, Oxford University
- Chris Ball, Managing Director, Atkins
- Dr Robert Bellamy, Presidential Fellow in Climate and Society in the Department of Geography, University of Manchester
- Michael Bradshaw, Professor of Global Energy, Warwick University
- Gillian Cooper, Head of Energy Policy, Citizens' Advice
- Rachael Fletcher, Director Regulation and Economics, Octopus Energy
- Neil Kenward, Director of Strategy and Decarbonisation, Ofgem
- Margriet Kuijper, Consultant, MKC Tynaarlo
- Adam Scorer, CEO, National Energy Action
- Paul Spence, Director of Strategy and Corporate Affairs, EDF
- Tom Thackary, Lead for Low Carbon Energy, CBI
- Mike Theobald, Director of Energy Transition, WSP

## CHAIR'S WELCOME AND INTRODUCTION

### Alex Sobel MP, Chair, Net Zero APPG

- A warm welcome to our panellists and audience and thank you for coming. We had an overwhelming response and I appreciate not all those who joined the waitlist could come.
- In December we came together in Parliament to launch our Net Zero Roadmap Report which set out clear pathways to accelerate low-carbon energy use and decarbonise our energy supply
- Since then, the war in Ukraine and a cost-of-living crisis have altered the political and energy landscape and in response the Government has published its [Energy Security Strategy](#) which promises to scale up lower carbon forms of energy including offshore wind and [committed to investing in energy technologies of the future](#).





- But in these interesting times, there remain both short- and long-term challenges if we are to embed and deliver the policy needed to reach net zero by 2050 – or sooner.
- This session will focus on how we can go further and faster in an energy crisis to decarbonise energy while keeping costs down for businesses and consumers.
- I am delighted that we have an excellent line-up of panellists from academia, business, consumer voices and energy practitioners and that we will also be hearing from the Minister, Greg Hands, later.
- Without further ado, I would like to introduce the first panel which will be explaining the current state of play on the big challenges.

**PANEL 1: THE STATE OF PLAY – GOING FURTHER AND FASTER IN AN ENERGY CRISIS**

**Myles Allen, Professor of Geosystem Science, University of Oxford**

- Updated APPG on how the recommendations in the Net Zero Roadmap, specifically regarding energy and fossil fuels, apply to policy in the current context of the energy crisis.
- Net Zero means one ton of carbon dioxide stuffed back into the earth's crust for every ton generated by any remaining hydrocarbons that get extracted from the Earth's crust. That is what net zero must mean for it to be sustainable. For all the positive messages we are getting from the Minister just now, I am not sure that everybody has gotten that and that is where we must be. 100% disposal of CO2 by 2050. To get to that, we need to be at 10% by 2030, if we are lucky the UK might be a 1.5%. That is not a path to 100% disposal by 2050.

**Michael Bradshaw, Professor of Global Energy, University of Warwick**

- Gave a perspective on the geopolitical situation, particularly regarding Ukraine, and how this is currently affecting and may in the future affect the UK's energy and net zero strategy.
- Highlighted that achieving net zero means managing down the fossil fuel system at the same time as building up the low carbon system.

**Dr Robert Bellamy, Presidential Fellow in Climate and Society in the Department of Geography, University of Manchester**

- Gave a perspective on scaling up investment in new and innovative technologies for use by businesses and consumers to decarbonise energy.
- Stressed that we cannot deliver on net zero without new technologies, but that 'technologies are socio-technical systems that will not work without the people, policies, procedures that go along with them.' The lesson is that societal input is crucial to scale up net zero energy.





**Margriet Kuijper, Consultant, MKC Tynaarlo**

- Gave a perspective on how the Government can decarbonise the energy sector and enable the behavioural change to adopt greener choices.
- Proposed that the key focus should be turning threats into opportunities with reference to the international context.
- Ukraine presents both a risk and opportunity in terms of energy transition; the opportunity is to transition more quickly; the risk is that we still need to replace the gas and oil that we are getting from Russia. She argued that it is possible to replace dirty Russian gas with mitigated, abated domestic gas production or from close by the region or from deals with Africa or from America.

**PANEL 2: SCALING UP NET ZERO ENERGY**

Each panellist spoke on their business’s approach to the net zero energy transition and what more needs to be done to go further and faster.

**Chris Ball, Managing Director, Atkins**

- Proposed that to reach net zero by 2050 we need to electrify as much as possible, decarbonise that electricity supply industry, provide alternative fuels for those things that we cannot electrify, and then capture carbon for the things that we just cannot wean ourselves off the fossil fuels.
- Atkins is looking between now and 2050, to build about 275 gigawatts of electricity supply infrastructure - that is roughly 10 gigawatts a year. We need to double the rate at which we are building electricity supply infrastructure in the UK and maintain that for the next 28 years.

**Paul Spence, Director of Strategy and Corporate Affairs, EDF Energy**

- Mentioned that EDF have some further offshore wind projects that are in the pipeline.
- We would like to see the Government be a bit more ambitious about offshore as well as onshore wind. He argued that we have several good sites around the UK where nuclear could be deployed.

**Rachael Fletcher, Director of Regulation and Economics, Octopus Energy**

Proposed 3 practical policy areas that we can address to scale up and do so at minimum cost:

1. First, one of the key ways that we can achieve that 10 gigawatt investment per year at speed and do it as cheaply as possible, is to make sure that we are squeezing as much of those new renewable investments onto the existing grid as we can. One thing that is missing is a promise to have a review of the energy markets.
2. Secondly, there needs to be a revision to the onshore planning regime. We can build a windfarm in a year; what takes 7 years is the long-drawn-out planning process. A





lot of people have commented that onshore wind is one of the cheapest renewables, and plenty of places on this island are suitable for onshore wind.

- The third thing is that we need to put customers at the heart of our policy making on net zero. If we are not bringing customers with us, it is going to slow things down and make things much more expensive. The next phase of decarbonisation can involve customers making decisions about what technology they invest in when their gas boiler breaks, what car they drive for example. We desperately need to bring that thinking into the Government's policy, it is absent. Furthermore, we cannot expect people to think about how to invest in their energy use if they are struggling to pay their bills. This needs urgent attention.

**Mike Theobald, Director of Energy Transition, WSP**

- Proposed that we need to focus on the deliverability of projects.
- It is quite frightening that we must deliver year on year approaching 2050. The CITB estimated that we need 350,000 additional construction workers to meet 2050 targets and we need those workers by 2028, and those figures pre-date the energy security strategy – it is absolutely staggering. The human resource factor in all this is going to be the great limiting factor.

**PANEL 3: KEEPING COSTS DOWN FOR BUSINESSES AND CONSUMERS**

Each panellist spoke on how we can transition to net zero energy while keeping costs down for businesses and consumers amid an energy and cost-of-living crisis.

**Neil Kenward, Director of Strategy and Decarbonisation, Ofgem**

- Highlighted the effect of energy costs on businesses and how these impact on the transition to net zero.
- There are very few companies now who are still operating under energy contracts that they signed prior to Ukraine crisis, so now they are trying to re-negotiate on prices sometimes double or three or four times more expensive – so that is a huge challenge for all business to deal with.
- International businesses are considering where to build and energy costs is something that they always question, and some businesses have abandoned multi-million-pound investments in net zero.
- There needs to be some targeted support for businesses because of the price spike in energy costs, and then looking at the energy competitiveness for our energy intensive sector. The challenge is to create the conditions for businesses to invest.
- The UK has made fast progress, but we are still reliant on natural gas. This rise in prices is hitting consumers and business hard. The price cap was not able to shield consumers from those rising prices, and it is not the answer to the affordability challenge. The rise in the gas price has changed the economics of the transition to





net zero, and we do not know if these prices will be sustained – we hope not. In the world of volatile gas prices, low carbon technologies are looking incredibly cheap, ones that looked expensive don't look so expensive anymore. This really is a reason to accelerate transition.

**Adam Scorer, CEO, National Energy Action**

- Highlighted that the poor will be ‘drag anchor’ on moving towards net zero especially through energy efficiently if we don't do anything about it.
- The Government's energy strategy paper is incoherent, especially with the cost-of-living crisis. The people who get hit the hardest by the cost-of-living crisis are people on the lowest incomes, in the least efficient homes - if you have a strategy that does not address this then it fails.

**Gillian Cooper, Head of Energy Policy, Citizens' Advice**

- Highlighted the impact of the cost-of-living crisis on consumers meaning that people are not able to make the changes we need to enable the transition to net zero.
- We all know that the current cost-of-living crisis is having a significant impact on people, and it is going to get worse unless there is more financial support available to deal with the impact of rocketing energy bills before October; we welcome the Government's support, but it is not enough.
- At Citizens' Advice we are already breaking unwelcome records - the number of people coming to us for support from fuel to food vouchers is rising each month. Overall demand for advice is also up significantly. We had over 300,000 people coming to us for advice in the month of March and that was before bills went up by 54% on 1<sup>st</sup> April so without further support its going to get worse. That is a risk to the net zero transition – because when you have an increasing number of households who cannot afford to pay for the essentials, people are not in the space to think longer term.

**Tom Thackary, Lead for Low Carbon Energy, CBI**

- The Government's new energy security strategy has set out key roles for new and innovative technologies. New and expensive technologies such as these can raise important societal concerns – including but by no means limited to, their readiness, their maturity, their environmental risks, feasibility, costs, geopolitical considerations, safety, and ethical considerations. One response might be to not use them but it's a myth that we can deliver on net zero without new and innovative technologies. For example, carbon removal methods – the removal of carbon is definitively unavoidable if net zero is to be achieved. If new technologies are to be





scaled-up, they must be incentivised responsibly to ensure the broader legitimacy of support for and ultimately success of the technology choices made.

## KEYNOTE ADDRESS

### Rt Hon. Greg Hands MP, Minister of State for Business, Energy and Clean Growth

- Recent events in Ukraine have shown the building of robust, secure, and thriving UK energy market is an issue of national security, as well as an important driver of the transformation of the UK economy alongside decarbonisation. Additionally, with the rising cost-of-living, we need to reduce the cost of how we travel, how we grow our industry, how we power and heat our homes, reducing demand as well, and that will only happen if all our energy and gas supply is more secure, more sustainable, and less vulnerable to manipulation by others.
- Referenced what the Government is doing to move to net zero - ten-point plan for a green industrial revolution and the net zero strategy in October 2021.
- Stated that the Government is committed to phasing out all consumption of Russian oil and oil products by the end of this year.
- Provided an overview of the recently announced [energy security strategy](#), highlighting what this will achieve:
  1. Generating more low carbon energy in the UK will shield consumers from volatile international fossil fuel markets and provide new opportunities to level up the economy and drive job creation across a range of sectors.
  2. A move to more low carbon heating, whether electric heat pumps or hydrogen and more electric transport will allow all sections of the economy to benefit from our homegrown renewable energy.
  3. Accelerating the deployment of cheap, renewable power and rolling out further energy efficiency measures, will help lower household energy bills by driving down costs in the long term.
  4. We have also just published the hydrogen investment package to drive further investment, low carbon hydrogen production in the UK and enabling projects to begin construction next two years.
  5. As we produce more of our own electricity, families will be much better protected from energy price spikes caused by volatile expansion of fossil fuel markets.
  6. Immediate action on climate change will, of course, improve our health and wellbeing and will protect our natural environment, securing the livelihoods of our children and grandchildren.





- The Minister stated he believes that these many of these targets will challenge us, but it is perfectly doable to get to net zero by 2050 and decarbonise the electricity system by 2035.

## PANELLIST Q&A

### Paul Spence

- Asked the Minister to elaborate on two issues that he did not highlight as much – energy efficiency and nuclear energy.

### Rt Hon. Greg Hands MP, Minister of State for Business, Energy and Clean Growth

- On energy efficiency - We did launch the heat and building strategy right at the end of October, which put energy efficiency right at the centre. We have put a lot of money, £450 million into a boiler upgrade fund, and that is already taking effect. I think we already seeing companies which are responding - I know Octopus, for example, and others have said they are responding and making more efficient heat pumps.
- On nuclear - I do not think that there's been a government as committed to nuclear as this government. Nuclear will be 25% of our electricity generation by 2050, 8 power plants, that is a big increase on where we are now. Our existing commitment only replaces our current capacity - we're currently at 12 nuclear power stations in this country, 11 will be decommissioned by 2030 - so now need to move forward and create more nuclear.

## CHAIR'S CLOSING REMARKS

The Chair thanked the Minister, the panellists and all those present for attending.

