

Net Zero

All-Party Parliamentary Group

ChairAlex Sobel MPVice-Chair:The Lord CallananVice-Chair:Wera Hobhouse MPVice-Chair:Dr Simon Opher MP

Minutes

Accelerating Net Zero

The Road to Clean Power by 2030

How can we go further and faster to shift from ambition to action and achieve clean power by 2030?

17:30-19:30, Tuesday 25th February 2025

Thatcher Room, Portcullis House, SW1A 2JR

Programme context

About the Net Zero APPG

The Net Zero APPG works to shape and inform future Net Zero policy. Its Net Zero Action Plan, Net Zero Roadmap, and Net Zero Myth Busting Report have helped embed clear policy goals on what the UK needs to do to go further and faster to transition to the UK's 2050 Net Zero target. The Net Zero APPG is on a mission to:

"Secure a net zero carbon and clean industrial and economic future for the UK; embed zero-carbon solutions and accelerate the UK's commitment to delivering decarbonised growth, innovation and a net zero carbon economy"

The Net Zero APPG:

- Provides a cross-party Parliamentary platform to support Net Zero policy and incentivise Government plans and secure joined-up, long-term net zero solutions in partnership with business
- Works to ensure Net Zero policy is embedded across government departments
- Places Net Zero as key to the delivery of the UK Government's industrial and clean growth strategies

 Promotes the Government's commitment to adopt a whole systems approach to decarbonising UK infrastructure

Net Zero APPG 2025 Programme: Accelerating Net Zero

The Net Zero APPG's 2025 programme is set against a backdrop of political change and global uncertainty. While the new Government has made bold commitments on clean power and green growth, major policy and investment gaps remain. Reaching Net Zero requires urgent, coordinated action across all sectors of the economy, yet too many areas still lack the policy certainty, infrastructure, and incentives needed to accelerate the transition.

Building on our 2024 focus—Unlocking Net Zero: Innovation, Investment and Incentives—the 2025 programme, Accelerating Net Zero, will push for the decisive action required to meet the UK's 2030 emissions reduction target (an 81% reduction in emissions against 1990 levels) and lay the groundwork for long-term decarbonisation. Our work will focus on the 'pinch points' holding back progress, examining the key policy levers needed to scale up solutions, unlock investment, and drive behaviour change. The 2025 programme will also highlight key cross-cutting priorities that underpin the Net Zero transition, such as grid capacity, skills, investment, planning reform, and behaviour change, ensuring that policy is embedded and integrated across government.

This year's Net Zero APPG programme includes sessions on:

- **Clean Power by 2030** ensuring the Government's accelerated clean energy target is backed by investment, planning reform, and grid capacity expansion.
- **Decarbonising Transport** addressing gaps in EV infrastructure, the transition of heavy transport and sustainable aviation and the role of public and active travel
- **Net Zero Homes and Buildings** tackling barriers to heat decarbonisation, retrofit, and energy efficiency, with a focus on just transition, affordability and skills.
- **Industry and Infrastructure** accelerating investment in the technologies and innovation needed to decarbonise high-emission industries, from hydrogen and CCUS to sustainable materials.
- **Financing the Transition** scaling up public and private investment needed to leverage and support Net Zero ambitions across all sectors.

The cross-cutting questions the Net Zero APPG's Accelerating Net Zero programme seeks to address include:

- What policy changes are needed to accelerate the Net Zero transition across all parts of the economy, addressing shared challenges like grid capacity and carbon capture scalability?
- How do we decarbonise high-impact sectors while ensuring coordinated policy incentives that reflect cross-sector inter-dependencies?
- How do we unlock investment and innovation to drive scalable and integrated solutions for Net Zero?
- How can the UK go further and faster to secure Net Zero investment in the UK and achieve clean and green growth?
- How do we accelerate the skills needed in a Net Zero economy, ensuring alignment with cross-cutting priorities like energy, housing, transport and infrastructure?
- What policy levers and incentives would work to accelerate the adoption of Net Zero by businesses and consumers?
- What does the Government need to do to incentivise and accelerate behaviour change and embed positive political and public support for Net Zero transition?

The Road to Clean Power by 2030

The key question

This session focused on addressing the overarching question:

"How can we go further and faster to shift from ambition to action and achieve clean power by 2030?"

Pinch points

The session saw various pinch points identified.

- The UK's electricity grid lacks the capacity to support the rapid expansion of renewables, with long delays in connecting new projects and uncertainty over how grid upgrades will be funded:
 - There is a long queue of projects waiting to be connected, which must be resolved to meet Net Zero targets.

- More centralised and strategic planning is needed to ensure the right projects are prioritised.
- There is an urgent need for grid investment, smart demand management, and better connection policies.
- Planning rules are holding back clean power: Onshore wind and solar projects remain tied up in complex and slow planning processes, preventing faster deployment at scale.
 - Planning reform is essential but needs to balance speed and proper regulation.
 - Judicial reviews and environmental regulations were highlighted as major blockers.
 - Community energy projects lack a clear framework within current planning and CfD schemes.
- Investor confidence is fragile: Developers and investors require clear, long-term policies to commit to new projects, but uncertainty around regulation, funding mechanisms, and market structures is delaying investment.
 - Market uncertainty and regulatory inconsistency are deterring long-term investment.
 - There is a need for clarity on market reforms before Allocation Round 7 to enable long-term planning.
 - Investors require certainty on pricing mechanisms to ensure viable returns
- Energy pricing is not working for consumers or renewables: The current system does not always prioritise the cheapest, cleanest power or encourage demand flexibility, limiting the benefits of a renewables-led energy system.
 - The Contracts for Difference (CfD) scheme is a key tool for decoupling gas and renewables pricing, but additional reforms are needed.
 - Granular and transparent pricing signals are essential to help consumers make informed choices.
 - Addressing the imbalance in how energy costs are structured (e.g. levies on electricity rather than gas) is key.
- Storage and flexibility are lagging behind: Without sufficient battery storage, interconnectors, and flexible demand solutions, the UK risks generating more renewable power than it can effectively use.
 - There is a disconnect between renewables generation and demand response solutions.
 - Storage solutions—including batteries, pumped hydro, and hydrogen—must be scaled up to ensure grid stability.
 - Data centres were raised as a growing energy challenge, with new technologies needed to improve efficiency.

Cross-cutting priorities

• Decarbonising the energy grid is the 'easiest' solution

Decarbonisation of the energy grid is necessary and very welcome.
 However, some of the trickier actions – such as demand reduction,
 shifting to electric vehicles and retrofitting – will be much harder, and
 more politically difficult.

• How can we better align clean power with transport decarbonisation?

- Expanding renewable capacity must go hand in hand with the electrification of transport, ensuring grid resilience and charging infrastructure keep pace with EV adoption and public transport electrification.
- More coordination is needed to ensure grid and charging infrastructure expand at the right pace.
- Electrification of transport should be included in broader planning and grid investment discussions.

How do we accelerate the decarbonisation of homes and buildings?

- The transition to low-carbon heating—such as heat pumps and district heating networks—depends on a clean, reliable, and affordable electricity supply.
- There is a risk that without strong policies and funding, heat pumps and insulation could follow the same stalled trajectory as previous retrofitting schemes.
- The cost of home energy improvements remains a major barrier to adoption.
- Insulation and efficiency measures must be scaled up alongside clean power generation.

What does the UK need to unlock the industrial and economic opportunity of clean energy?

- A rapid clean power transition can help drive growth in green industries, but energy-intensive businesses require certainty on electricity costs and long-term policy commitments to make the shift.
- The CBI reported that Net Zero industries are growing three times faster than the wider economy, demonstrating economic opportunity.
- Energy price volatility remains a major concern for businesses looking to invest in green technologies.
- There is a need for policies to support industrial decarbonisation, ensuring the transition is not an economic burden.

Non-verbatim minutes

CHAIR'S OPENING REMARKS

Lord Callanan, Officer, Net Zero APPG

The session opened with a welcome and introduction, setting the context for the discussion on delivering clean power by 2030. It was emphasised that this is a pivotal moment in the UK's Net Zero journey. The Government's commitment to achieving a fully decarbonised electricity system by 2030—five years ahead of the original target—was acknowledged as an ambitious but necessary step. However, significant challenges remain in achieving this goal.

While the UK has made substantial progress in clean energy, particularly in offshore wind, it was recognised that renewables must now be scaled up across the board. Key barriers to achieving this were outlined, including slow planning processes, grid constraints, investment uncertainty, and pricing challenges. It was noted that policy interventions must not only support individual projects but also enable a coordinated, economy-wide transition to clean power.

The session brought together Parliamentarians and a panel of experts from industry, academia, and policy to explore these issues. The discussion began with reflections on the critical pinch points holding back progress, followed by a broader examination of how clean energy policies must align with transport, housing, and industrial decarbonisation.

The Chair then introduced the panel, who were invited to address the central question of the session:

"How can we go further and faster to shift from ambition to action and achieve clean power by 2030?"

Andy MacNae MP took the chair temporarily while Lord Callanan went to vote

THE ROAD TO CLEAN POWER PANEL Kirsten Oliver, Managing Director, Energy, WSP

Kirsten Oliver highlighted the significant progress made by the Government since July, including lifting the de facto ban on onshore wind, forming NESO, creating GB Energy, and publishing the Clean Power 30 plan. She stressed that with only six years remaining,

a mission-driven approach is essential to delivering a clean power system powered by at least 95% renewables, nuclear, biomass, and carbon capture and storage (CCS).

She welcomed the certainty provided by Clean Power 30, which gives the supply chain confidence to invest and develop the necessary skills. She also pointed to the recent NESO consultation on outage planning as evidence that traditional delivery methods will not achieve the required scale and pace. She outlined WSP's approach, including expanding its UK resource base, upskilling in digital and AI, and engaging internationally to address short-term skills gaps.

On infrastructure, she highlighted the National Grid Great Grid Partnership as an example of collaborative delivery, noting that the £18 billion-per-year Great Grid Upgrade is expected to quadruple the pace of grid development. She described the enterprise model, where National Grid's supply chain partners—including WSP and five major construction firms—work collaboratively rather than competitively to accelerate delivery.

She provided an update on offshore wind, reporting that 30.7 GW is installed or committed, with 7.2 GW consented, but noted that an additional 7-14 GW is needed to meet the 2030 target of 43-50 GW. She welcomed DESNZ's engagement with industry and highlighted ongoing consultations on skills development, CfD reform, and planning flexibility to speed up deployment.

She concluded by emphasising the need for pragmatism, collaboration, and efficiency, expressing confidence that with industry input, the pace of progress can be maintained.

Sulaiman Ilyas-Jarrett, Head of Policy and Strategy, Renewable Delivery, Department for Energy Security and Net Zero

Sulaiman Ilyas-Jarrett outlined key pinch points affecting the pace of renewable energy deployment, particularly around investment certainty and market reform. He emphasised the need for long-term certainty to encourage investment and ensure projects can proceed with confidence. He highlighted the importance of clarity on wider market reforms before Allocation Round 7, allowing investors and developers to incorporate these changes into their long-term planning.

He stressed that investment levels must align with 2030 targets and that renewables should be procured at the best possible price to maximise efficiency and affordability. On the issue of de-coupling wind and gas prices, he identified the Contracts for Difference (CfD) mechanism as the key tool for achieving this.

He also addressed the role of flexible storage in the energy transition, noting that pricing structures will be a crucial factor in incentivising investment and uptake. Additionally, he emphasised the importance of empowering consumers through demand-price response mechanisms, ensuring that individuals have access to granular and visible price signals to better understand and engage with the energy system.

Callum Cook, Product and Standards Manager, USystems

Callum Cook outlined the challenges posed by data centres in the transition to clean power, highlighting their growing energy demands and the need for sustainable solutions.

He emphasised the importance of adopting sustainable cooling technologies as a key step towards meeting the UK's Net Zero ambitions, ensuring that data centres can operate efficiently while reducing their environmental impact.

Professor Aaron Gillich, Policy and Public Affairs Manager, London South Bank University

Professor Aaron Gillich highlighted the importance of effectively communicating policy and its benefits to the public. He noted that too often, discussions around Net Zero focus on the perceived costs rather than the long-term benefits, which he attributed to poor communication. He stressed the need for clearer messaging to ensure that the advantages of the energy transition—such as lower long-term energy costs, economic growth, and improved public health—are better understood and recognised.

Lord Callanan returned to the Chair.

Tristan Zipfel, Director of Strategy, Markets and Investments, EDF Renewables UK & Ireland

Tristan Zipfel emphasised the importance of unblocking the planning process to accelerate the transition to clean power. He highlighted the urgent need for grid investment and upgrades, noting that the queue of projects waiting to be connected must be addressed to meet Net Zero targets. He called for a robust framework to ensure that priority projects are connected first, suggesting that a more centralised planning system may be necessary. However, he cautioned that this shift must be carefully managed. While addressing renewable energy expansion, he indicated a preference not to focus too heavily on solar within the discussion.

ACCELERATING THE CLEAN POWER MISSION? PARLIAMENTARY RESPONSE PERSPECTIVES AND DISCUSSION

Lizzi Collinge MP

Lizzi Collinge raised the issue of nuclear energy beyond 2030, referencing the Heysham Nuclear Power Stations in her constituency. She asked the APPG to consider nuclear power as part of its future work, stating that she could not see how the UK could provide a secure baseload without nuclear energy in the long term.

Lord Callanan responded that the coalition government had missed an opportunity to invest in nuclear and stressed that the Treasury must be lobbied to ensure support for future nuclear projects.

Tristan Zipfel acknowledged that while 2030 is an important milestone, it is only the start of the long-term energy transition.

Pippa Heylings MP, Liberal Democrat Spokesperson (Energy Security and Net Zero)

Pippa Heylings emphasised the progress already made towards Net Zero and noted that the 7th carbon budget, due to be released the following week, would provide a clearer picture of what had already been achieved.

She highlighted how energy system "pinch points" impact investor confidence, warning that uncertainty has been a major barrier to investment. Looking beyond 2030, she stressed that electricity demand will continue to grow significantly and that government planning must reflect this.

She warned against simplistic solutions, such as assuming that deploying heat pumps alone would be sufficient, without addressing energy efficiency challenges. She argued that without substantial government investment in vulnerable households, the uptake of heat pumps would be limited, just as insulation initiatives had failed to take off.

She also highlighted the broader benefits of improving energy efficiency, including reducing cold homes, improving health outcomes, and tackling child poverty, which would help build public support for Net Zero policies.

On planning, she agreed that barriers must be removed, but warned that reform should not be solely about deregulation. She argued that spatial planning at devolved, regional, and local levels is essential for good decision-making.

Simon Opher MP

Simon Opher spoke about the importance of community energy projects, citing examples such as wind turbines that directly benefit local communities. He expressed concern about the ban on onshore wind and called for faster approvals for such projects.

Lord Callanan responded that planning remains the key issue, acknowledging that while the barriers to onshore wind were well understood, the challenge lay in overcoming political opposition. He identified judicial reviews and environmental regulations as the two major pinch points affecting planning decisions.

Andy MacNae MP, Rossendale and Darwen

Andy MacNae highlighted the significant increase in gas prices and its impact on energy policy. He questioned Sulaiman Ilyas-Jarrett on whether there was a tipping point in pricing related to Contracts for Difference (CfD).

He also referenced projects within his constituency and raised concerns about the future of Net Zero in terraced streets, warning that short-term funding cycles risked delaying progress. Furthermore, he stressed the need for an agile approach to energy policy, noting that small businesses and community groups are often at the forefront of innovation and must be supported.

Sulaiman Ilyas-Jarrett's Response

Sulaiman emphasised that people must feel ownership over energy policy to secure public buy-in. On planning, he confirmed that there had not yet been a carve-out for community energy within the CfD framework but suggested that initiatives like GB Energy and local energy plans could provide future opportunities.

Regarding agility in energy policy, he expressed hope that an organisation like GB Energy could operate innovatively with commercially minded leadership.

On gas and renewables pricing, he noted that cost increases were primarily driven by international gas prices and that the tipping point for price shifts depended on multiple

factors. He explained that as renewables and battery storage capacity increased, the number of times gas set the wholesale price would decrease, leading to fewer price spikes.

Pippa Heylings MP

Pippa raised an example of a data centre in her constituency that provided benefits such as installed heat pumps. She questioned whether similar models could be used to power local public amenities, such as swimming pools.

CLEAN POWER QUESTIONS AND DEBATE Audience Q&A and discussion

Doug Parr, Greenpeace UK

Doug Parr asked about the political attack on Net Zero and how public buy-in could be strengthened.

Professor Aaron Gillich responded that clean power remains one of the cheapest Net Zero solutions, particularly in comparison to more expensive alternatives like heat pumps. He reiterated that poor communication has hindered public support by failing to effectively explain the benefits of the transition.

Simon Opher argued that reducing energy bills would be a key way to increase public support, while Pippa Heylings cautioned that people may not feel an immediate reduction in prices, even with wider system reforms.

Lord Callanan noted that decarbonising the electricity grid had been the easiest political step in the Net Zero transition but that future policies affecting planes, agriculture, and transport would be far more politically contentious. He highlighted the challenge of price rebalancing, explaining that levies on electricity bills—such as the Warm Home Discount—had been implemented because the Treasury had refused to fund them from general taxation. He suggested that shifting these costs onto gas bills could be a necessary but politically difficult step.

Pippa Heylings spoke about the importance of green jobs and apprenticeships, highlighting the economic opportunities in the transition.

Adrian Byrne, RealZero

Adrian Byrne raised the role of the NHS as a major electricity consumer and asked whether demand-side management could be used to help the NHS save money while supporting growth and skills development.

Lord Callanan referenced the Public Sector Decarbonisation Scheme as a key initiative in this area.

Audience Member - Lessons from Germany and Canada

An audience member asked what Germany and Canada had done wrong in their Net Zero strategies.

Lord Callanan responded that every country has a different energy history. He pointed to Germany's reliance on cheap Russian gas and Canada's fragmented provincial energy systems as key challenges.

Tristan Zipfel noted that exposure to geopolitical factors, particularly in gas markets, had caused major energy price shocks. He argued that renewables remain the cheapest long-term solution to energy security.

Lord Callanan also pointed to Germany's failure to implement smart meters, due to a campaign by the tabloid press, as an example of a policy misstep that could hinder demand management in the future.

Sulaiman Ilyas-Jarrett reinforced that gas prices, rather than the energy transition itself, had caused high costs and rejected the notion that renewables were to blame for rising energy bills.

Sophie de Schwarzburg-Gunther

Sophie asked about the role of data centres in the energy transition and called for a broader discussion on their significance. Callum Cook responded that 78% of data centres are still using traditional methods, consuming 29 million kW of energy, whereas newer systems could reduce this to 8.5 kW.

Pippa Heylings questioned whether smaller, decentralised data centres could provide a more sustainable alternative to large facilities that require significant water resources.

Nicola Pitts, Independent Networks Association

Nicola Pitts asked the panel for their views on the NIC report on distribution networks. Sulaiman Ilyas-Jarrett noted that this issue was not within his brief, but confirmed that NIC and DESNZ were engaged in discussions on the topic.

Audience Member - The Cost of Net Zero

Gary questioned whether the UK could afford the Net Zero transition within the current fiscal environment and raised concerns about energy security if renewable generation drops. He argued that there was a high level of risk in the 2030 energy strategy.

Lord Callanan acknowledged that the NESO report highlighted the significant financial challenge posed by the transition. He stated that while the costs would depend on future CfD auctions, investment in clean power would be expensive but necessary.

Kirsten Oliver challenged the assumption that Net Zero investment was unaffordable, asking what the risk would be of not proceeding with the transition.

Sulaiman Ilyas-Jarrett referenced the NESO report, cautioning against downplaying the risks of inaction. He also pointed to the CBI report indicating that the Net Zero economy is growing three times faster than the wider UK economy, highlighting the positive economic opportunity.

Lord Callanan reiterated that gas prices had tripled overnight during the Ukraine war, forcing the UK to spend £95 billion on energy intervention. He warned that without significant investment in renewables, the country risked another similar crisis.

Andrew Tod, Sureserve

Andrew asked how energy efficiency could become a more investable proposition.

Lord Callanan responded that home energy efficiency upgrades—such as wall insulation—provided far better returns than consumer investments like new kitchens, but noted that short-term government interventions had hindered progress. He criticised the Treasury for overcomplicating schemes and argued that a sustained approach with long-term support for quality workmanship and supply chain development was essential.

Pippa Heylings added that work was already underway to make energy efficiency more investable, highlighting initiatives from C40 and UK100. She stressed that scaling up these efforts was key to attracting private sector investment. She also noted that

stronger enforcement and compliance were needed, suggesting that a single regulator for the construction industry could help drive standards and investment.

Charles Thompson, Offshore Energy Catapult

Charles Thompson spoke about the importance of innovation in the energy transition and the role of new technologies in accelerating progress.

Bill Rees, ENSO

Bill Rees raised concerns about current technology caps on transmission solar and battery storage for 2035.

Tristan Zipfel responded that further engagement on these issues was needed, acknowledging that greater flexibility in planning and regulatory frameworks would be necessary to scale up deployment.

Chris Ashley, RHA

Chris Ashley asked how all industries could be included in the energy transition.

CHAIR'S CLOSING REMARKS

Lord Callanan, Officer, Net Zero APPG

Lord Callanan thanked all the speakers for their contributions and insights throughout the session. He expressed relief that the discussion had not delved into zonal pricing, acknowledging that while it remains a significant challenge, the questions raised during the session highlighted both the barriers to progress and the immense opportunities ahead in the transition to clean power.



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