ALL-PARTY PARLIAMENTARY GROUP FOR ENERGY STUDIES

40th Anniversary Inquiry

"What are the energy policies that will drive an independent UK to Net Zero while fuelling the economy?"

ENERGY POLICY



This is not an official publication of the House of Commons or the House of Lords. It has not been approved by either House or its committees. All-Party Parliamentary Groups are informal groups of Members of both Houses with a common interest in particular issues. The views expressed in Energy Focus are those of the individual organisations and contributors and do not necessarily represent the views held by the All-Party Parliamentary Group for Energy Studies.



A report by



The All-Party Parliamentary Group for Energy Studies

Established in 1980, the Parliamentary Group for Energy Studies remains the only All-Party Parliamentary Group representing the entire energy industry. PGES aims to advise the Government of the energy issues of the day. The Group's membership is comprised of over 100 parliamentarians, 100 associate bodies from the private, public and charity sectors and a range of individual members.

This report sets out the results of our Inquiry into energy policy, launched 4th December 2020.

PGES, Room 2.2, Speaker's House, House of Commons, London SW1A 0AA

www.pges.org.uk

Editor: Matthew Gordon matthew@pges.org.uk 0797 445 1085

Assistant: Megan Cunningham

Executive Council

Chairman Ian Liddell-Grainger MP Officers Alan Brown MP | Julie Elliott MP | Taiwo Owatemi MP | Jim Shannon MP | Alex Stafford MP Executive Council Sir Christopher Chope OBE MP | Neil Parish MP | Steven Edwards | Professor Martin Fry | Ian Graves Dr Simon Harrison | Paul Needley | Dr Barbara Vest OBE | Simon Virley | Graham Ward CBE | Janet Wood | John Wybrew OBE

Contents

Foreword

Andrew Griffith MP, UK Net Zero Business Champion for CoP26	3
Ian Liddell–Grainger MP, Chairman of PGES	4
Introduction to PGES 40th Anniversary Inquiry	5
Executive Summary	6
Policy Proposals	7
Evolution of Energy Policy	8
Full report	9
Your Sector	9
Decarbonisation Process	13
Governance and Organisation	17
The 2021 Agenda	24
Appendix I Summaries submitted by respondents Appendix II Inquiry Questionnaire	27 39

Thanks

The All-Party Parliamentary Group for Energy Studies (PGES) would like to thank all respondents, including energy ministers, past and present, members of PGES and those outside PGES who responded as users of energy. We would also like to thank Andrew Griffith MP, UK Net Zero Business Champion at Business, Energy and Industrial Strategy for contributing his foreword.

Special thanks are due to the core team who helped to produce the report, Paul Needley of Enertek International, Dr Barbara Vest OBE, Janet Wood of New Power Report and Megan Cunningham of the secretariat for PGES.

Copyright 2021 All-Party Parliamentary Group for Energy Studies. All rights reserved. None of the articles or addresses in this publication may be reproduced, stored in a retrieval system. or transmitted in any form, by any means., electronic, mechanical, photocopying, recording or otherwise, without prior written permission of the Copyright owner. "We must beware of needless innovations, especially when guided by logic" Winston Spencer Churchill 1942 Printed in Great Britain by First Colour Ltd, 15 Newman St, London W1T 1PA

FOREWORD by Ian Liddell-Grainger MP Chairman, All-Party Parliamentary Group for Energy Studies (PGES)



Without energy, there is no recovery, no economy, no future.

I am delighted that PGES has been able to conduct this Inquiry into energy policy at such a critical time. Not only is PGES celebrating its 40th anniversary, but the UK is finding its feet, independent from Europe, there is a pandemic running its course and we have the biggest global summit on Climate Change approaching at the end of the year.

Let us not forget that just two years ago, the only topic under discussion was Brexit. Since then, we have had a change of leadership in the UK, US and Europe including a new Prime Minister, new Leader of the Opposition and two new Presidents. Everyone is looking forward to CoP26 in Glasgow and discussing the future of energy and Climate Change.

This demonstrates so clearly how the lifespan of energy policy is far greater than that of politicians, how its effects are felt by future generations and how important it is we get it right now.

Outside the world of politics, industry and academia, all of whom are dependent on energy, were invited to let us know their thoughts on energy policy, how it affected them and where they believe the opportunities lie for the future. These ranged from small companies to multi-national organisations, from energy intensive users to those who never really notice their reliance on energy.

In a very short time, we have pulled together opinions and suggestions from across the spectrum. We have also aimed to set this out for legislators, with the key suggestions made clearly at the start.

Although our respondents come from across the spectrum, there was a common message for clear, set timelines, policies and desired outcomes to take us to Net Zero with immediate action. To achieve our Net Zero ambitions, an holistic approach must be taken, setting Regulations and using Demonstration at government level, with Implementation at local authority level and Education at consumer level.

By the time we reach CoP26 at the end of the year, the UK must demonstrate leadership in decarbonisation.

Our focus must be on fossil free fuel, with the collection and use of all renewable energies, but we must keep two strong themes: "Net Zero must also mean Zero Waste" and "Use it, don't lose it, don't waste it."

I hope you find this an interesting document, that draws you in to read more.

Ian Liddell-Grainger MP Chairman PGES

INTRODUCTION ALL-PARTY PARLIAMENTARY GROUP FOR ENERGY STUDIES 40th ANNIVERSARY INQUIRY

"What are the energy policies that will drive an independent UK to Net Zero while fuelling the economy?"

https://pges.org.uk/pges-40th-anniversary-inquiry

The objective of the Inquiry was to be able to make policy recommendations for energy that will affect future generations after the energy transition.

The All-Party Parliamentary Group for Energy Studies (PGES) aims to inform the government of the energy issues of the day. To mark its 40th Anniversary, PGES held an Inquiry into the importance of energy in the context of the UK as an independent nation.

We sought views on the key policies required from those who supply, need and use energy. The Inquiry asked fundamental questions, across our activities, about energy as our vital resource. Without energy, there is no economy.

The timing of this Inquiry was perfect. Outside the EU, the UK is establishing policies that will affect future generations. The 'fourth industrial revolution' has moved industry from mechanical to digital, and a lifestyle revolution, accelerated by CoViD-19, is dramatically changing our energy footprint. Meanwhile, the challenge of Net Zero has prompted local, regional and sectoral organisations to use their initiative, skills and resources to encourage location-based decarbonisation.

EXECUTIVE SUMMARY

Responses from those outside the energy sector showed remarkable similarity to those within.

Key points

- The transition to Net Zero to prevent excessive Climate Change must involve everyone, from legislators to ordinary members of the public, through educators and communicators.
- There is a legal obligation to achieve Net Zero by 2050, so all government measures should reflect the Energy Transition, subsidies should encourage reduction of waste, demand and carbon content, not reward wasteful or fossil use.
- Collaboration is essential across Parliament, Government departments, with regional and devolved administrations. National targets will be delivered best locally the CoViD-19 vaccination programme is a great demonstration of this.
- The key risk to decarbonisation was seen as not moving quickly enough. Clear long-term policies are required with a roadmap for achievement and effect, policy should not specify the technology nor method of attainment. The markets will deliver.
- Key opportunities were seen in the use of fossil free fuel of all variants with consumer engagement led by regional schemes. In addition, a new fairer and more effective energy system is required that values demand, storage and supply equally.
- The biggest elements of energy policy holding us back are inflexibility of market rules and a lack of roadmap for policy. Policy should set out a clear timetable for energy transition, with milestones, but without selecting technologies or techniques.
- The dominant key to decarbonisation is hydrogen, but it needs education at all levels to drive consumer behaviour change.
- Education was also seen as an urgent need to enable sectors to become active and flexible consumers of energy.
- The most effective government investment should be focussed on R&D and retrofit in existing buildings (both public and private). Government should use their estate to lead by example and data should be made widely available.
- There was 'across the board' support for giving local and regional organisations a key role in delivering Net Zero. The 'place based' message was tempered by the fear of fragmentation as each region or area has very different natural resources, skills, expertise and businesses.
- Hard areas to decarbonise are transport, especially aviation and heat. Both are essential, hydrogen was seen as a means to make progress in heat, as it needs no major change in end-user behaviour.
- To assess the efficiency, effectiveness and cost of decarbonisation, a specific working group needs to be established. This would also ensure that information presented to the public is fair, balanced and transparent.
- Policy consensus is seen in the desire to end fossil fuel use but a date needs to be set. Similarly, we need clarity on what the Net looks like in Net Zero.
- Policy negotiation is still needed on timescales and financing the transition.
- Actions that need to be taken to raise awareness on energy and the climate emergency focussed on clear and consistent communication and regular updates on progress, as demonstrated by the Climate Assembly UK and the CoViD-19 response. Again, public buildings modernisation will demonstrate to consumers what is available.
- When looking at what the UK should do differently post Brexit, post CoViD-19, there were recommendations for practical actions, promotion of the UK and political response. We need to establish a clear plan for a realistic Energy Transition in line with our climate targets and be fully coordinated across Whitehall.
- Agenda Items for CoP26 included:
 - \rightarrow To set a clear agreed date to stop using fossil fuels.
 - \rightarrow Securing agreement to adopt green recovery, due to its economic benefits.
 - \rightarrow Focus on the UK demonstrating leadership in decarbonisation.

POLICY PROPOSALS

OVERRIDING PRINCIPLES

- Set clear, unambiguous policy based on science.
- Present policy decisions as a trade-off, with the counterfactual made clear.
- Define what the 'Net' looks like in Net Zero.
- Make clear the delivery timeline.
- Take a 'Learn, Adopt and Share' approach to solutions to speed up deployment.
- Consider societal benefits in analysis (e.g., reduced health care, more skills training).
- Collect consistent data, hold it centrally and make it freely available to any organisation to use (respect GDPR).
- Use consistent, transparent standards which are simple to understand.
- Use life cycle analysis not short-term measures.
- Expand levelised cost to the levelised cost of emissions.
- Enable all techniques and technologies to help achieve our aspirations for decarbonisation of heat (e.g., demand reduction or management, storage, biomass, hydrogen, CCUS, offshore and onshore renewable and nuclear).

POLICY RECOMMENDATIONS

USE ALL LEVELS OF GOVERNMENT AND DELIVERY

- Set national targets with the help of local and regional organisations and place the obligation to deliver on local authorities who have direct responsibility for some emissions as well as key influence over other decision makers and support them with government funding.
- **Support energy research**, innovation and demonstration projects at a regional scale and deliver via umbrella organisations such as Local Enterprise Partnerships to share expertise.
- **Collate data** on local, regional and national scales and make it available.

PROMOTE JOBS

- **Direct education and training** to ensure that the necessary skills are available to carry out the necessary work over the coming years.
- Provide incentives and make positive use of public sector support, local as well as national, to encourage job creation, including trade and construction jobs in energy projects as well as science and management specialisms.

PROVIDE ADVICE

- Engage with domestic consumers so they can make informed decisions about energy in their homes and about more complex tariffs.
- Educate consumers about the carbon implications of their transport and heating choices. The consumer must have access to advice regarding their technology choices and government is regarded as unbiased.

REDUCE INVESTMENT RISK

• Help the supply chain invest by designing subsidy regimes to even out the 'spend and return' fluctuations.

PROTECT HOME INDUSTRY

• **Protect UK manufacturing** with Carbon Border Tariffs or similar schemes, including for embedded emissions. This ensures that UK manufacturing remains competitive while decarbonising at a greater rate than other countries.

USE JOINT WORKING ACROSS THE ECONOMY - BUILD SUPERTEAMS

- **Build a network across government** departments to promote a whole systems approach.
- **Include academia, catapults, industry**, policy makers and finance to provide a holistic approach.

IMPROVE THE BUILT ENVIRONMENT

- **Use Building Regulations immediately** to accelerate improvement in the built environment.
- **Review planning regime** urgently and update to align with the UK's Net Zero commitment.
- **Improve public health** through building upgrades.

SUPPORT R&D

• Support for investment in R&D either by grants, subsidies, or increased R&D tax credits.

HYDROGEN

- **Support the hydrogen economy** for use in transport and home heating.
- **Tackle process emissions** through support of CCS in conjunction with the hydrogen economy.

RAW MATERIALS

• **Support research** into alternative raw materials with a lower carbon footprint.