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PGES 40th Anniversary Inquiry Report

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

Renewables: leading transitions to a more sustainable energy system – Dr Fatih Birol, IEA

ENERGY FOCUS



PGES 40th Anniversary Inquiry Report launched

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The journal of



PGES
All-Party Parliamentary Group
for Energy Studies
Founded in 1980



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 day 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.

Published three times a year, Energy Focus records the Group's activities, tracks key energy and environmental developments through parliament, presents articles from leading industry contributors and provides insight into the views and interests of both parliamentarians and officials.

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“Owing to past neglect, in the face of the plainest warnings, we have entered upon a period of danger. The era of procrastination, of half measures, of soothing and baffling expedience of delays, is coming to its close. In its place we are entering a period of consequences.”

Winston Churchill, November 12, 1936

Easter Egg hunt. Count how many eggs have been hidden by the Easter Bunny in the cover illustration and tell us where they are. There is no prize, this is just for a bit of fun...

Please send your suggestion to matthew@pges.org.uk

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CHAIRMAN'S FOREWORD



We are in the midst of unlocking our lives from the restrictions of CoViD. Pace is gathering towards CoP26 in Glasgow in November. Spring is in the air and there is an undeniable feeling of growing optimism.

Energy policy remains centre stage globally. Alok Sharma, the President Designate for CoP26 led the International Energy Agency CoP26 Net Zero Summit on 31st March with one of our recent speakers, Fatih Birol, the Executive Director of the IEA as well as securing agreements from around the world. International activity increases with the US leading a global Earth Day summit on April 22nd and has made a major announcement regarding offshore wind.

The report arising from the PGES 40th Anniversary Inquiry into energy policy “**What are the energy policies that will drive an independent UK to net zero while fuelling the economy?**” has been published. More details can be found in later pages of this edition and all documents on our website pges.org.uk/inquiry.

PGES strives to inform the Government of the day on the energy issues of the day and has been recognised as such. Using the responses from the inquiry, we continue to put forward consolidated policy suggestions before MPs, Peers, ministers and civil servants.

Since its launch, many other organisations are also calling for concerted and logical long-term ambitions and action towards net zero. One key message this I have taken away is the importance of engaging everyone, so that we all understand what needs to be done and can each play our part in moving towards net zero.

This is the third edition of *Energy Focus* that comes to you from under lockdown – I suspect that it may not be the last, despite the amazing vaccine roll out across the UK. We have undergone a lifestyle revolution. We must now consider what aspects of that new lifestyle we want to continue, at work, at home and at leisure.

In the remainder of the year we will see the whole world focussed on energy and particularly the UK. That is why, PGES stands ready to play its part. We will need to ensure that promises made before CoP26 are fulfilled afterwards.

Please take the opportunity to engage with PGES as the attention on energy intensifies. The path to net zero will need clear thinking and good judgement. It is the voice of membership, both large and small that gives us our confidence, clarity and conviction.

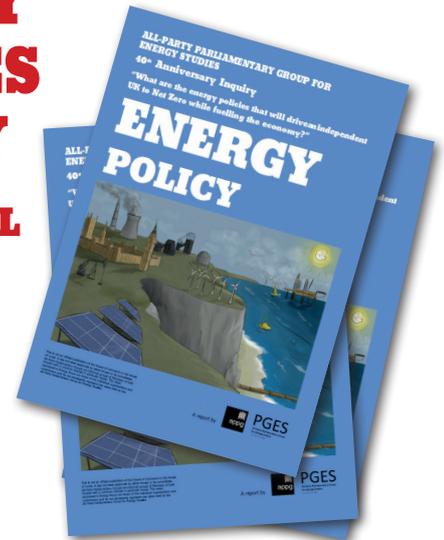
Ian Liddell-Grainger MP
Chairman PGES

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?”

FROM THE **FOREWORD**

by Ian Liddell-Grainger MP
Chairman, PGES



Without energy, there is no recovery, no economy, no future. The lifespan of energy policy is far greater than that of politicians, so its effects are felt by future generations and it is important we get it right now.

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.

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

To achieve our Net Zero ambitions, a holistic approach must be taken, setting Regulations and using Demonstration at government level, with Implementation at local authority level and Education at consumer level.

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.”

INTRODUCTION

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.

The full report can be found on the PGES website [HERE pges.org.uk/inquiry](https://www.pges.org.uk/inquiry)

THE EVOLUTION OF ENERGY POLICY OVER 40 YEARS

AN ASSESSMENT BY ENERGY MINISTERS

All-Party Parliamentary Group for Energy Studies (PGES) is one of the longest standing APPGs. This year marks 40 years since we took on our role of informing the Government on the energy issues of the day. We collated personal views from past energy ministers to illustrate how energy issues have changed since 1980.

The UK is undergoing a revolutionary period. We are going through:

- a political revolution, as the UK moves outside of the European Union.
- a lifestyle revolution, with a mass population adoption of working from home driven by CoViD- 19.
- an energy revolution, as we move from fossil domination to low carbon; and
- a digital revolution, moving from manual to digital, the fourth industrial revolution.

Acceptance of Climate Change is universal as is the need to reverse the trend. However, there remains a gulf between our ambitions, the level of debate and the recognition of energy as a vital resource.

We asked every past energy minister the same questions to see how energy issues and policies have evolved:

1: Which department had responsibility for energy during your tenure?

Since the formation of PGES in 1980, energy has been the responsibility of no less than 7 different departments. There have been 54 energy ministers, of whom 44 are still alive, and many are still in Parliament or the upper House. There have only been 2 Government departments with a focus directly on energy (Department of Energy 1980 - 1992 and Department of Energy & Climate Change 2008-2017).

2: What was the most pressing energy policy issue when you were in office?

- 1980: Oil supply and price; militant coal mining unions threatening power supplies.
- 1990: The privatisation of the Electricity Industry, which was effectively completed in 1990.
- 2010: The pricing of nuclear power.
- 2020: Net Zero target.

3: What is the most pressing issue for the future?

Every response was based on Net Zero.

4: On what issue have you changed in your opinion most, since being in office – and why?

“Recognition that the UK coal industry declined to zero even faster than believed then (1979/80). Recognition that ‘peak’ in oil is in demand, not as was then in supply. Recognition that renewables can supply a larger part of power supplies, at competitive cost, than thought earlier.”

“I haven’t” (2010)

“The potential of hydrogen to transform our economy”. (2020)

“I think in 1990 at the time we saw energy security being best delivered by a mixture of coal, gas and nuclear-fired power stations. For reasons that are self-evident, the UK’s reliance on coal-fired power stations will end in the not too distant future. With the growth of renewable energy and the everincreasing potential of renewable energy, I consider further expenditure in nuclear power to be a waste of taxpayers’ money. The infrastructure is incredibly expensive, and we have not yet really, satisfactorily, resolved the policy issues surrounding nuclear waste disposal and everyone grossly underestimates the contingent liability of the eventual disposal of nuclear power stations when they are no longer serviceable. The reality is that, given the nature of the nuclear industry, taxpayer investment in further nuclear power in the UK is simply going to create most of the jobs in France, rather than in the UK.”

5: When do you think we will achieve our goal of Net Zero emissions?

This was a slightly more varied set of opinion. Estimates of achieving Net Zero ranged from 2040 to impossible.

PGES would like to thank all the past energy ministers who took part in the survey.

But, one unsolicited comment struck home – this is a twoway transaction:

“I should like to compliment the All-Party Parliamentary Group for Energy Studies on 40 years of thoughtful and well-considered policy work.”

Sir Tony Baldry, Parliamentary Under Secretary of State 1990

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 fuel use.
- Collaboration is essential across Parliament, Government departments, and 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.
- 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:
 - ➔ To set a clear agreed date to stop using fossil fuels.
 - ➔ Securing agreement to adopt green recovery, due to its economic benefits.
 - ➔ 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 regimes** 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 for projects leading to Net Zero.

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.