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An interview with The Rt Hon Matthew Hancock MP

Balancing the energy trilemma Joan MacNaughton CB, World Energy Council

The fine particulates of air quality Dr Sayed Hayat, CEAMD

ENERGY FOCUS

Balancing the energy trilemma

Joan MacNaughton CB from the World Energy Council looks at the role of politics and finance in improving energy systems on page 4

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Parliamentary Group
for Energy Studies





The 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. We champion cross-sector energy research and development. The Group's membership is comprised of over 190 parliamentarians, 130 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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CHAIRMAN'S FOREWORD



It's the end of another year, packed full of energy debates, both domestic and international, and I'm delighted that the Parliamentary Group for Energy Studies has managed to discuss so many of these important issues in *Energy Focus*, during speaker meetings and at our annual flagship dinner and reception.

At the end of 2013 *Energy Focus* looked towards the international energy stage to look at how policymakers around the world were grappling with similar issues in unique ways - from the Western Governors' Association in the United States, to Germany's drastic "energy turnaround" and Switzerland's "Energy Strategy 2050".

To round off 2014, this year we have taken a look with the World Energy Council's Joan MacNaughton CB at this year's Trilemma report, at LNG and global markets with Prof. Gavin Bridge, before bringing it to a more local level with Dr Syed Hayat to look at air quality in cities - an issue which the House of Commons Environmental Audit Committee recently recommended needed urgent and long term action.

Looking forwards, the beginning of 2015 will see parties begin to formally announce their manifestos and more specifically their energy policy, and we hope to hear more about these in our pre-election speaker meetings.

In the meantime you can see what our expert contributors have to say:

- Joan MacNaughton CB, Executive Chair, World Energy Trilemma, discusses how bringing politics and finance in sync can improve energy systems **(page 4)**;
- Prof. Gavin Bridge of Durham University, examines LNG and global markets **(page 6)**;
- Dr Syed Hayat, Director at CEAMD, looks at how air quality can be improved in our cities **(page 8)**; and
- The Rt Hon Matthew Hancock MP talks to us about learning from history, shale gas and renewables **(page 10)**.

We are always delighted to hear from members, so please do share your thoughts and feedback by emailing our Editor, Sophie Fernandes, at sophiefernandes@pges.org.uk.

I look forward to seeing you all at the annual House of Lords dinner!

Ian Liddell-Grainger MP
Chairman of the Parliamentary Group for Energy Studies

BALANCING THE ENERGY TRILEMMA



Joan MacNaughton CB, Executive Chair, World Energy Trilemma at the World Energy Council examines how bringing politics and finance in sync can improve energy systems

Energy systems around the globe are under significant strain because of the rise in energy demand and the pace and unpredictability of changes in energy supply, with governments struggling to find solutions to meet the unprecedented levels of investment needed in the energy sector.

In developing countries, 1.3 billion people are still without access to electricity whilst 2.9 billion lack cooking facilities. In developed countries, the replacement of ageing plants and the need to decarbonise the economy pose significant challenges. At the same time, technological and cost breakthroughs provide huge opportunities in the energy sector, as is the case with renewables and energy efficiency. Robust policy and regulatory frameworks that include the right investment conditions for the energy and financial sectors to create a sustainable energy future are key.

Energy Trilemma Index

Over the past six years, the World Energy Council, in partnership with global management consultancy firm Oliver Wyman, has assessed the sustainability of

national energy systems through its Energy Trilemma Index, ranking 129 countries according to their success in meeting the three goals of the energy trilemma, i.e. the triple challenge of achieving energy security, energy equity and environmental sustainability. At the same time, the WEC has examined the drivers and risks preventing the development of sustainable energy systems and provided recommendations to overcome these barriers.

Through 2012 and 2013 over 100 global energy leaders were approached to provide insights on what works and what does not work in terms of policy design and implementation.

Balancing the energy trilemma

The resonance of themes between senior energy industry executives and policymakers highlighted the need for increased dialogue between public and private stakeholders. If on the one hand energy industry executives asked policymakers for coherent, predictable and long-term energy policy, on the other policymakers demanded that energy executives be more proactive in sharing their knowledge, insights

and experiences. If business leaders longed for more public and private initiatives to foster research, development and demonstration (RD&D), public leaders wished the energy industry to be less risk averse.

The dialogue created between industry and policy executives pointed to another group of decision makers, key to pressing forward competitive and sustainable energy systems: the financial sector. This became the target for WEC's research in 2014. Once again, the similarity of the topics they addressed was striking.

With global energy demand predicted to increase and even double by 2050, an estimated cumulative investment of USD40.2 trillion is required across the energy infrastructure supply chain to 2035, with an additional USD8trn investment needed in energy efficiency. Although there is enough capital available from the private sector, it is extremely sensitive to political and regulatory risks. The message that policymakers must develop coherent, transparent and long-term energy policies resonated across the interviews. Well-enforced regulation and