

ERP Meeting Note: Post-plenary session – Panel Discussion
Wednesday 14 January 2015

On Wednesday 14 January, ERP held a post-plenary session for Members and colleagues from the wider energy field. This meeting note provides a summary of the points put forward by each panel member and related discussions.

ERP would like to thank the panel members for their involvement and contributions at this session.

Topic for discussion:

“What are the top energy and climate policy priorities for an incoming government?”

Panel members were asked to put forward their top 3-5 views on the above question before opening to the floor for Q&A / discussion.

Chair: Keith MacLean, ERP Industry-side Co-chair

Panel Members:

- [Martin Grant](#), CEO Energy, [Atkins](#)
- [Professor Jim Skea](#), [Research Councils UK Energy Strategy Fellow](#) (attendance in an independent capacity)
- [Dr Doug Parr](#), Chief Scientist, [Greenpeace UK](#) (attendance in an independent capacity)
- [Philip Sellwood](#), CEO, [Energy Saving Trust](#)
- [Dame Sue Ion](#), Nuclear Expert, [Royal Academy of Engineering](#) (attendance in an independent capacity)

Panel discussion:

Martin Grant, Atkins:

1. We should accept that **cost of energy** will go up because we want ‘better’ energy (e.g. to reduce climate change) and all available solutions (nuclear, wind, biomass, CCS etc) have a cost impact over conventional generation. This fact should be more widely known and understood. If we squeeze the price that we’re prepared to pay for energy, then we stifle innovation; but human aspect is that prices will harm the poor in society - so the priority is to **tackle fuel poverty** and regrettably the rest of us will have to pay for more expensive energy.
2. There is an imminent crisis relating to the **price of oil** (48\$/barrel today) and the **impact of this on the UK**. We need to ensure the oil industry (which currently pays taxes of a 60-80% marginal rate) does not collapse; so the benefits for the rest of the economy, e.g. employment, exports and investments in science and innovation will not be lost.



Jim Skea, Research Councils UK (speaking independently):

1. The '**trilemma**' of **mistrust** between **politicians, utilities and the public** and the fact that utilities feel vulnerable, politicians feel impotent and customers feel mistrustful. A key point in the launch of the [Electricity Act in the 1980s](#) was the need for trust. A question now is whether we are happier with the sector today than in 1980s? The retail market has 20% of profit and 90% of the hassle. The market has failed customers, but this is sometimes pitched as customers failing the market. However 'customer switching' suggests that consumers see electricity as an undifferentiated good and have actually **chosen to not choose**. If we move back to a situation where we **don't choose** between energy retailers, and instead go back 15 years to local electricity monopoly suppliers; then the mistrust and complexity that blocks progress, including innovation and decarbonisation would be reduced. A **monopoly model** would remove the complex overlay of the current market.

Doug Parr, Greenpeace (speaking independently):

1. There is the need for an **honest debate** about what we're paying for. It is no longer credible to say that the UK is taking risk and going 'ahead of the pack'. Instead, now we risk being too far behind, but **finances don't allow for big expenditure on low-carbon**. The UK needs to go back to basics about what we need to spend on energy and we need to make proper use of this evidence. However evidence has never had such a lower standing as now, where people can just make stuff up and it's "OK"!
2. **The policy system is centred on large centralised generation** - but real innovation dynamics are in **small-scale energy**, e.g. smart grids, solar energy, etc. These changes challenge the way that Ofgem chooses to regulate networks and how suppliers charge etc. The new Government in May/June 2015 faces great problems in fitting these innovations into the system and related regulations. **Political devolution** to cities, Local Authorities, small businesses etc. is needed to allow this innovation;
3. *If points 1 & 2 were achieved, then we could attempt point 3, which is to* **maintain and expand the flow of investment into the energy sector**. There is no shortage of need for expenditure, e.g. in buildings, transport etc. If this is still largely delivered by private investment, then we need a proper route for that. For example an **expanded Green Investment Bank** (one of the best things set up by the current government!) and also new **policies for reinvigorating the energy efficiency market and heat**, etc.

Philip Sellwood, Energy Saving Trust:

1. **Make energy efficiency the first fuel**. Command **HMT to recognise efficiency as an infrastructure priority** in buildings, cities, at the scale of roads and runways etc. This relates to a Cambridge Econometrics

- report: [The Economics of Climate Change Policy in the UK - Sept 2014](#), that would give net benefits of £3bn per year, every year;
2. **Look at efficiency across departments and policies**; e.g. health is impacted by a lack of energy efficiency in homes. The '[Warm Up New Zealand](#)' project has prevented costs of \$500 per home for every \$50 invested;
 3. **Continue to support EU regulations where they help in terms of regulations**. Confront The Mail and tell people what efficiency really is - saving people energy and money in the home;
 4. A positive point: **The costs of low-carbon homes have fallen** – it now takes only 8% more to deliver a low-carbon home compared to the alternative – the new Government shouldn't divert from continuing that trend.
 5. **Don't allow short-term volatility in fossil fuels to derail innovation** which is vital for jobs, the economy etc.

Sue Ion, Nuclear Expert:

1. [The Energy Research Partnership](#) was designed to make the UK energy sector successful on an international stage and to encourage innovation etc. This vision is still valid, but we perhaps **didn't recognise the scale of the engineering challenge in terms of delivery – it's 2015 already and many scenarios talk about 2020**. It's not just the **hard engineering** that's an issue but also the **soft engineering** of acceptance, behaviour etc. We need to recognise the engineering challenge, need to be clear on what is still to be done and need to reduce the risk e.g. for investment. This includes consistency by and across Government.
2. **Timing is critical for some technologies**, which need funding at the right time, for innovation etc. Some need lots of money, but bring big returns. We need to be aware of the fact that **not all technologies are equal** in terms of what they provide, but that **all are needed**. There is therefore a **need to provide different types of support** for each (in terms of money and timing). **Energy security is equivalent to national security** – we can cope with potholes, but we can't cope with the lights going out!

Q&A session:

1st set of questions:

- Wealth inequality should be key to the election;
- Climate change cannot be solved within the energy sector alone; the four forms of welfare are: economics, political, social and religious, and we need to focus on all four - not just economic. This would allow us to demonstrate progress faster than money alone shows.
- If the Government is not willing to spend anything more, could the UK take some subsidy from deployment and spend it on innovation?

- Carbon pricing has not been mentioned here. Is it the view that EU-ETS is a 'dead duck?'

1st set of answers from panel:

Doug Parr:

- New metrics would be useful; but so much of the UK's financial architecture is based around growth as the only measure. This is damaging – the UK needs a plan to take the first step in the process of introducing new metrics.
- We shouldn't just do innovation for a while and hope that it will solve climate change problems - we need to deploy quickly! Agrees that the ratio of deployment to innovation budgets is too high, however is wary because that argument has been politicised by those that want to do very little about the situation!
- The Carbon Price is not going to be useful any time soon and we have failed to make the EU ETS work. The Carbon Price might be high enough in 10 years to cause some marginal fuel switching, but does not see it giving confidence for long-term investments.

Philip Sellwood:

- Not only has EU ETS failed lamentably (would only work at >40Euros), but those with a vested interest in defending it are preventing progress elsewhere. We need to admit that it has failed, stop it, learn from it and reinvest the time and effort elsewhere!

Sue Ion:

- There is some scope for rebalancing of the budget for innovation; but shares Doug's concerns - deployment gives innovation feedback from real-world technologies e.g. new solar, offshore wind, modular nuclear.

Jim Skea:

- Disagrees with Julian – there has been lots of work done by UKERC that shows that energy efficiency does reduce emissions and that the rebound is not big enough to cancel it out. If you go for zero GDP growth, you would hurt the younger generation.
- We need to invest more in R&D, but it's tricky to make the argument to change the balance with deployment funds. There are examples of poor innovation spending, due to a combination of technical and political over-exuberance.

Martin Grant:

- Adam Smith (economist) said that there are certain things that are better delivered by governments than by private companies. The problem is that we have not decided how energy should be delivered!

2nd set of questions:

Keith MacLean (Chair) to attendees:

- Are there any political points to make?
- A regulatory question: If we can't burn all fossil fuel resources, and each country wants to maximise its fossil fuel exploitation, can these two be married?
- We need to get citizens on side.
- Less impressed with the message that energy costs will rise. We need to tell the public about cost reductions from innovation also.
- Householders don't have enough data - could smarter homes cause a paradigm change in how we think of energy in our homes?

2nd set of answers from the panel:

Sue Ion:

- Things that seem politically attractive can lead to rushed decisions that are negative in the longer-term - we need an evidence base that shows the benefits over several parliaments.

Keith MacLean (Chair):

- There is less of a cross-party consensus than there was; can energy be depoliticised?

Jim Skea:

- Regarding Rufus Ford's point and fossil fuels - HMT will see the fall in oil prices impact on UK GDP and exports and will decide that it is better to support the exploitation of national resources. We could be resource-poor like Japan, or resource-rich like America - proposals like Ineos to frack near Grangemouth are appealing to locals due to jobs etc.

Doug Parr:

- We are dealing with politics, it is brute economics - hydrocarbons are getting cheaper; but they would be very cheap in a zero-carbon world because they could not give away the stuff!
- Need to work with a government throughout a parliament.

Martin Grant:

- Energy will cost more in a low carbon world and can't yet compete with the incredible gift of hydrocarbons. We are going to have to spend more effort and money to solve this problem.
- We do need to stop burning fossil fuels but it will take 20-30yrs to get there and we need to recognise that fossil fuels are necessary for society

in the short term. The UK economy is (currently) highly dependent on the North Sea oil revenues.

Jim Skea:

- The price of oil has always been higher than the cost of extraction so the question is who makes the profit from this difference? Who gets the economic rents from this will be the big wrestling match at Paris 2015 negotiations.

Philip Sellwood:

- Views are not as polarised as is sometimes presented. Top-down and local solutions are not incompatible, and all solutions are needed!
- There are no smart homes, meters, etc. rather there are smart people. There is a need to translate data into information to allow people to make decisions. This has got mixed up in hugely generic discussions about the 'internet of things', whereas data experts know that specific data is needed.

Post-plenary attendees:

Organisation	Member First Name	Member Last Name
ABB	Colin	Green
Atkins	Martin	Grant
BBSRC	Ian	Stanton
Bosch	Carl	Arntzen
BP	Bob	Sorrell
BP	Tony	Espie
Carbon Trust	Tom	Delay
Carbon Trust	Eric	Lounsbury
CCC	David	Joffe
CCC	Mike	Thompson
CCC	Mike	Hemsley
DECC	Tony	Ashton
DECC	Farida	Isroliwala
DECC	Nick	Bevan
DECC	Clive	Maxwell
DECC	Brian	Allison
DECC	Katrina	Williams
DfT	Miles	Elsden
EPSRC	Jacqui	Williams
ERP Analysis Team	Mark	Workman
ERP Analysis Team	Helen K	Thomas
ERP Analysis Team	Andy	Boston
ERP Analysis Team	Simon	Cran-McGreehin
ERP Analysis Team	Tom	Watson
ERP Co-chair	Keith	MacLean
ESRC	Chris	Noyce
EST	Philip	Sellwood
ETI	Jo	Coleman
Friends of the Earth	Naomi	Luhde-Thompson
Friends of the Earth Scotland	Duncan	McLaren
GE	Andy	Bullock
GE	Derek	Grieve
GoSci	Rupert	Wilmouth
Greenpeace	Doug	Parr
Hitachi	Andres	Larriera
Hitachi	Masao	Chaki
Hitachi	Anna	Wieckowska

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Hitachi	Yasunori	Sota
InnovateUK	Rob	Saunders
InnovateUK	Sarah	Tromans
National Grid	Nick	Winser
National Grid	Abigail	Jones
Ofgem	Gareth	Evans
Ofgem	Jeff	Hardy
Origami Energy Limited	Peter	Bance
PSI	Ben	Shaw
RCUK	Jim	Skea
Royal Academy of Engineering	Sue	Ion
Scottish Government	Chris	Stark
Shell	Graeme	Marks
Shell	Claire	Swadkin
SSE	Marta	Smart
SSE	Rufus	Ford
SSE	Alexandra	Malone
Sustainability First	Judith	Ward
UKERC	Mike	Weston
University of Cambridge	Julian	Allwood
Welsh Government	Ron	Loveland