

MEETING DATE: 3 October 2008

LOCATION: BERR Conference Centre, London

CHAIR: Simon Virley - DECC

ATTENDEES:

Members:

David Clarke ETI **Prof Brian Collins** DfT

Carbon Trust Tom Delay

David Eyton BP

Mike Farley Doosan Babcock

Iain Gray **TSB**

Joe Greenwell **Premier Automotive Group**

John Loughhead **UKERC** Ron Loveland WAG SSE Ian Marchant **DECC** Hunter Danskin Siobhan Peters HMT Graeme Sweeney Shell Alison Wall **EPSRC** Nick Winser **National Grid**

Nick Otter Alstom

Secretariat Mike Colechin, E.ON UK / Analysis Jonathan Dinmore GO-Science Team: Farida Isroliwala **DECC**

Jonathan Radcliffe ERP Analysis Team

Ian Welch **National Grid**

Non -Jeanie Cruickshank DECC **DECC** Members: David Curran Oona Muirhead SEEDA

> Brian Nixon Scottish Enterprise

Hunter Danskin Defra Jim Skea **UKERC** Carolyn Reeve DIUS

Adrian Ewer John Laing Plc

Apologies/ Pam Alexander **SEEDA** Not present: Prof John Beddington **GCSA**

Jonathan Brearley OCC

Geoff Norris No.10 Policy Unit



Paul Golby E.ON UK
Peter Bance Ceres Power

Alistair Buchanan Ofgem Alice Hume CBI Prof Michael Kelly DCLG

Paul Lewis Scottish Enterprise

Turlogh O'Brien Arup

Sue Ion Royal Academy of Engineering

Siobhan Peters HMT Andrew Smith DIUS Willy Rickett DECC

Chair's introduction

Simon Virley chaired the meeting. Machinery of Government changes had been announced that morning, and Willy Rickett had been called away to brief Ministers of the new Department, to be known as the Department of Energy and Climate Change. Simon welcomed Adrian Ewer from John Laing as an observer, noted the apologies and welcomed those attending as alternates.

Minutes of 4th July meeting were agreed.

<u>Carbon Trust / Technology Strategy Board /</u> Energy Technologies Institute

Simon Virley introduced Tom Delay who provided a short update presentation on the work that he, lain Gray and David Clarke had been doing on joint strategy development and co-ordination of activities, responding in particular to the actions from the last ERP Plenary meeting i.e.:

- to road map current industry energy innovation activities and identify their individual roles within this landscape.
- to develop a joint plan and identify key milestones for their common strategy development.

Tom reported that regular contact and meetings continued between the three Chief Executives. Their organisations were already working together with shared attendance and activities at relevant working groups and joint technical calls such as Marine and Offshore wind. This was done with the understanding each had different ownership with diverse operating models which were complementary and strengthened their collaborative offering.

Their joint working strategy continued to be developed and they hoped to share it with ERP by December.



Comments and questions on the presentations included:

- How in practice their distinctive capabilities and activities worked with their varying operating models and project allocations. The Carbon Trust were independent from industry and could allocate tasks independently; meanwhile the ETI had private partner ownership to determine priorities. The range of support and value of projects differed, with the ETI focussing on large projects that were likely to make a large impact / proof of scalability specifically in the energy sector, while the TSB provided complementary funding for energy technologies within the context of its more general support for the UK's industrial sector.
- It was difficult to spot the gaps in support for different technologies among the three, based on their short presentations, but it was recognised that only a snapshot could be provided in the time available. The TSB offered to give a more comprehensive presentation on what they were doing at a future date.
- A need for clear communication on the positioning of the three organisations in the context of the larger energy innovation landscape, identifying how they work with other players such as the Research Councils and ETF in particular. For example the ETF was designed to support demonstration to fill near market gaps, but how does this draw on earlier technology development driven by the other organisations? It was agreed that a grid to describe this larger interaction drawing out conclusions on where the gaps were for technology developments would be useful. ERP's work on technology mapping would also help understand the gaps and opportunities.

Energy Innovation Landscape

Jeanie Cruickshank explained that extra resource was available to work on the energy innovation landscape, and that as part of this, and following up from the July meeting, her team would be contacting members to get their views.

David Curran explained the draft energy innovation leaflet, which was aimed at a wider stakeholder group: to explain the main forms of support for energy innovation and where to go for help. Views were welcomed from members on:

- the format: i.e. whether to have a hard copy leaflet or website, probably hosted on the Business Link website.
- the content: how to ensure that it explained the energy innovation landscape as clearly as possible.

The meeting was reminded that the leaflet was in response to ERP members' comments at previous meetings..

Notes of 3 October 2008 meeting



ACTIONS:

- Carbon Trust / Technology Strategy Board / ETI to circulate their agreed joint working strategy to members by December.
- **Jeanie Cruickshank (BERR)** to contact ERP members to get their views on the energy innovation landscape.

ERP Members to feed views on the energy innovation landscape leaflet to Jeanie Cruickshank or David Curran

Demand Side Technology Innovation

Simon introduced Jim Skea who provided a discussion-opener on demand-side technology innovation and where ERP might focus in the future, raising the following points:

- demand side solutions had the potential to make a strong contribution across all the energy policy goals
- there is a diverse set of technologies on the demand side, making it complex to identify where these solutions currently sit in the innovation system and the organisations/funding (public and private) that support them. Clarification of potential gaps in technology support and barriers to progress is needed.
- RD&D on the demand side forms a small proportion of total energy innovation. In some sectors deployment was more important than support for early stage innovation.
- he questioned who ERP might need to engage with, in order to deliver an effective response to these issues
- demand for heat was critical as it accounts for almost half of UK energy use and CO₂ emissions

Comments / Discussion focused on:

- the barriers to demand side technologies; whether these will be addressed by
 more effort on research and development or on deployment? It was
 suggested that further mapping of where the UK should focus was required
 with a gap analysis of the areas in which further research is needed. There
 was also a role for Government in helping to deploy these technologies either
 in public buildings or through procurement.
- the ERP had tended to have a supply side focus and this was reflected in the membership. The question was raised as to whether there was a role for the



ERP to engage on the demand side. This could be done directly, through membership, or indirectly through demand side partnerships such as through the Low Carbon Vehicle Partnership or Energy Efficiency Partnership for Homes.

- the demand side technologies relied on policy and carbon pricing and therefore policy development needed to proceed in parallel with technology development to drive the innovation in this area.
- the behavioural aspects were important but the key factors in adopting these technologies were unclear, as were the policy interventions needed to drive deployment. Related to this were questions around how sustainable were evaluations of behavioural changes and how quantifiable the evidence base was, given the varied quality of some of the available data. It was concluded that more evaluation on behavioural changes was needed to support policy developments and influence energy users.
- there was a need to look outside the UK to see what was happening
 internationally, where there were lessons to be learnt and opportunities for
 technology transfer. Some potential examples of this included: the demand
 side research in the transport sector by France, Sweden and USA; the
 building research being dominant in some parts of Europe; China was ahead
 in deploying the technologies and how were they doing this. There was also a
 need to look at areas international bodies were focussing efforts such as the
 IEA.
- It was felt that the energy efficiency impacts of some technology developments on the demand side were not recognised, and there was a need to develop a road map for the effective deployment of energy efficiency technologies.

ACTIONS:

- ERP Analysis Team: to develop proposal for further analysis of demand side issues, specifically targeted at establishing what role ERP might have in this space.
- Co-Chairs: to consider inclusion of further item on heat and energy efficiency policy in future meeting agenda, to coincide with DECC's forthcoming heat and energy efficiency consultations.
- **Co-Chairs:** to review ERP membership and consider how it can engage more with the demand side and SMEs, directly or indirectly.

UK Engagement in International Energy Research and Innovation



Simon invited Nick Otter to provide an update on the work being done to establish UK engagement with the international energy innovation landscape, a follow up on action from the July meeting.

Nick led a discussion which identified a clear need to engage with and influence EU and international policy. Nick outlined the aim of the work:

- to take a strategic view of where international energy innovation fits
- to sign post potential priority areas
- to inform different players and encourage a co-ordinated UK approach to ensure added value

and the planned outcomes:

- to have a position paper with a draft for the March 2009 ERP meeting and a more robust draft for the June 2009 meeting.
- to have a more active role in the engagement of EC on the SET plan; helping to define priorities for a programme of activities playing to UK strengths and recognition that UK funding system was different to others'
- identification of ways of accelerating progress; and a more flexible way of assigning EU research funds

Members' comments and questions included:

- There was a need for improved UK engagement with EU initiatives (such as Ells and EERA), and this needed to be done early at the development stage if it were to be influential.
- The funding system in the UK was complex with fragmented executors of research. If priorities for engagement were established at an early stage, ways to respond could be devised.
- ERP could have a role in international engagement on the boundaries between government and industry. As examples: providing input to development of responses to G8 negotiations through the IEA's Energy Technology Perspectives work programmes, the EU's Zero Emission Fossil Fuel Power Plants (ZEP) Technology Platform, and the Australian Institute on CCS.
- There was a suggestion that the EU Commissioner on Energy could be invited to a future ERP meeting.
- There was concern about the level of input which members could provide to this work, considering all the other activities in which they were already involved.



- Some members had international reach through their member organisations and there was a question of how ERP could take advantage of this.
- It was suggested that ERP could look at utilising the TSB's Knowledge Transfer Network (KTN) mechanism as a tool for improving international engagement.

ACTIONS:

- **Co-Chairs:** to consider inviting someone from the EU Commission to a future ERP meeting.
- **ERP members:** to identify appropriate contacts within their own organisations for the Analysis Team to liaise with as they develop this activity.
- ERP Analysis Team / International team to prepare a position paper on progress for the March / April ERP Plenary meeting.

AOB / Closing Remarks

New Industry Chair

Simon announced Nick Winser had been selected as the next Industry Co-chair. Nick would take over the role from Paul Golby in January. Ian Welch would take over from Mike Colechin as part of the secretariat.

It was suggested that once Nick was in post, the Co-Chairs should undertake a full review of the current membership.

ACTION:

• **ERP Secretariat**: Schedule a review of current ERP membership in light of new private sector co-chair.

Simon reminded the members of some action points:

 ERP Members: to provide contacts for the Analysis Team to use when developing the ERP responses to HMG's heat and energy efficiency consultations