House of Commons
Energy and Climate Change Committee


Fourth Special Report of Session 2014–15

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The Energy and Climate Change Committee

The Energy and Climate Change Committee is appointed by the House of Commons to examine the expenditure, administration, and policy of the Department of Energy and Climate Change and associated public bodies.

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The committee is one of the departmental select committees, the powers of which are set out in House of Commons Standing Orders, principally in SO No 152. These are available on the internet via www.parliament.uk.

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Committee reports are published on the Committee’s website at www.parliament.uk/ecc and by The Stationary Office by Order of the House.

Evidence relating to this report is published on the Committee’s website at www.parliament.uk/ecc

Committee staff

The current staff of the Committee are Farrah Bhatti (Clerk), Vinay Talwar (Second Clerk), Tom Leveridge (Committee Specialist), Marion Ferrat (Committee Specialist), Shane Pathmanathan (Senior Committee Assistant), Amy Vistuer (Committee Support Assistant), and Nick Davies (Media Officer).

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Appendix: Government response

Introduction

The Government welcomes the Energy and Climate Change Committee’s input on low carbon innovation.

This response has been prepared by the Department of Energy and Climate Change (DECC), in consultation with the Department for Business, Innovation and Skills (BIS), Carbon Trust, the Engineering and Physical Sciences Research Council (EPSRC), Energy Technologies Institute (ETI), Innovate UK (formerly known as the Technology Strategy Board), Ofgem and other members of the Low Carbon Innovation Co-ordination Group (LCICG). The LCICG brings together, in order to coordinate programmes, the major public sector-backed organisations that invest in low carbon technology innovation in the UK. Its aims are to:

- Deliver affordable, secure, low carbon energy for the UK;
- Deliver UK economic growth; and
- Develop the UK’s capabilities, knowledge and skills.

The LCICG facilitates government bodies working in partnership, it is not a public-private partnership, nor is it an executive body with authority over programmes or budgets.

The Committee’s numbered recommendations are shown in bold type, and the paragraph references at the end of each recommendation correspond with those in the Committee’s report. The Government’s response is given beneath each recommendation, or group of recommendations.

Staff resource

1. DECC has admitted that a lack of staff resource is preventing it from engaging fully on European issues that are of direct relevance to UK innovators. These include the ability to shape funding programmes, help UK innovators access EU funding, and help shape EU standards. DECC should carry out a detailed assessment of staffing needs on European innovation issues in order to determine how much additional staff resource is required. DECC should work with the Low Carbon Innovation Coordination Group (LCICG) to deliver better support on EU issues for UK innovators. (Paragraph 17)

LCICG European Engagement

We agree with the Committee that more can be done to leverage greater value from EU programmes. This is against a background of LCICG members already being engaged in a range of international innovation support programmes, but realising that there is scope to further broaden and deepen our international partnerships. We have therefore prioritised an LCICG workstream on international engagement and leverage to:
• Continue to engage with and support the EU’s Strategic Energy Technologies Plan, and contributing to the development of the EU Integrated Roadmap and Action Plan for energy technology development;

• Seek to increase the UK’s share of the EU’s innovation funding streams – in particular the Horizon 2020 Energy Programme;

• Conduct an analysis of partnership opportunities within and outside the EU to identify priorities for future joint action programmes, and develop a shared coordinated plan to build strategic international partnerships on particular technologies.

As of April 2014 DECC has doubled the resource working on EU innovation funding to three FTEs. Additionally, there are at least a further dozen staff who regularly spend some of their time supporting EU work. DECC also funds the National Contact Point, which helps UK research institutions, companies and others access EU research, development and demonstration (RD&D) support programmes. In addition, the LCICG has set up a Working Group to coordinate and strengthen LCICG engagement, and International Engagement was identified in the LCICG Strategic Framework as one of four key priorities.

• The UK has a good track record of securing value from European Energy Research & Innovation programmes. Key successes include: The UK was involved in 63% of successful projects under the 2013 Framework Programme 7 Energy (FP7) Calls for Proposals;

• UK organisations were allocated 11% of the combined budgets of FP7 and the Fuel Cell and Hydrogen Joint Undertaking between 2007 and 2013; and

• €297m was allocated to UK organisations between 2007 and 2013, including €51m from the Intelligent Energy Europe Programme.

We recognise, however, that there is scope to do more and, as a group and individually, we are taking steps to increase our European leverage:

• DECC is already influential in shaping the €5.9 billion energy element of the EU’s new ‘Horizon 2020’ programme;

• DECC takes a highly proactive role in the Steering Group of the EU’s Strategic Energy Technology Plan: we Chair a Joint Actions Working Group of 18 Member States and the European Commission seeking to increase levels of collaboration and co-operation; we also co-ordinate a Group of 4 Member States acting as an inner advisory group to the European Commission to develop wider energy innovation activity;

• Through this, the UK is driving the development of a series of new European Research Area Networks (ERA-NETs), which enable joint calls between EU Member States and associated countries. We are leading these for Bioenergy, Ocean Energy, Offshore Wind and are contributing to the development of others
in close co-operation with our Member State colleagues and the European Commission;

- The UK participates in a Solar ERA-NET through Innovate UK;
- Innovate UK have established a presence in Brussels to better engage with EU level activity and to work more closely with the Research Council’s Brussels office.

**Standards**

DECC is helping to shape EU standards. In late 2012, the Department created the Energy Efficiency Delivery Office (EEDO), to drive a step change in energy efficiency. Part of EEDO’s wide-ranging remit is to influence two key European Directives relating to energy using products under two headings, the Ecodesign Directive and the Energy Labelling Directive. The Ecodesign Directive sets minimum environmental performance standards which remove the worst performing products from the market, and the Energy Labelling Directive steers consumers to the best performing products and more than 20 product types have so far been covered by the regulations, with 15 more to be covered in the next two to three years. Here, we play an important part in driving up ambition in an area that is negotiated collectively by all the European Member States and the Commission, and is directly applicable in UK law.

**Metrics**

2. We are concerned that the lack of responsive, timely metrics may cloud investment decisions by the Government and LCICG and we recommend that the LCICG reports back with a plan to improve the rate at which information on metrics is shared. (Paragraph 24)

3. We welcome efforts to develop common metrics to compare technologies across different sectors. The Government should provide in its response to this report an update on the pilot and how long it will be before the metrics are applied to all sectors. (Paragraph 25)

Members of the LCICG have been working together to develop a set of common metrics to measure the performance of public spending against the main objectives of the LCICG. The aim of the metrics project is to give a better understanding of the overall impact of public spending in low carbon innovation and an indication of value for money – it is not about comparing the effectiveness of different technologies. The impacts of public sector investment in technologies can often only be properly evaluated on a scale of many years.

Metrics are currently being piloted using a sample of 52 offshore wind projects being managed by DECC, Innovate UK, ETI, EPSRC and the Carbon Trust. Data for all projects has been collected and is currently being analysed. The results from the pilot and next steps will be discussed by LCICG in Autumn 2014. It is anticipated that the metrics will be applied to all TINA technology areas by Spring 2015 and that a plan will be put in place to disseminate insights and outputs.
Intellectual property

4. Ensuring that UK innovators benefit more from their intellectual property will help to build greater confidence for potential investors to support low carbon innovation. We support the idea of developing a tool similar to the export finance guarantee that offers protection to UK innovators and entrepreneurs. We recommend that the Government further develops this idea and report back to us on the viability of such a tool. (Paragraph 35)

The Intellectual Property Office (IPO) recognises that innovators and others need appropriate protection for their invention and innovation. The Enterprise Finance Guarantee (EFG) can already be used by innovators and entrepreneurs and the IPO sees no need for duplication. However, IPO knows that businesses can struggle to find effective ways of protecting their intellectual property, so is working with the insurance industry and other financial institutes to encourage the development of a more effective market.

Composition of LCICG membership

5. We conclude that the governance of the LCICG is muddled, with an unhelpful mix of core and associate members and inadequate transparency on decision-making and information sharing. Ofgem should be a core member of the Low Carbon Innovation Co-ordination Group. If the Government considers that there may be a conflict of interest with Ofgem’s role as a regulator, it should explain in its response to us why this is the case. We further recommend that the LCICG reassess its membership structure regularly to reflect developments in the low carbon innovation sector, including encouraging greater participation from ad-hoc members and developing subgroups when appropriate. (Paragraph 43)

LCICG’s role and governance

We do not accept the Committee’s characterisation of the LCICG’s governance – the experience of the members is that the governance arrangements work effectively for the Group’s members. The differentiation of core and associate members enables organisations to become involved in the Group’s work programmes to a degree that they feel is appropriate given the level and focus of their own interest in the low carbon innovation agenda. We do agree that it is important to keep the membership under review and we also agree that sub-groups are important to encourage wider participation in the Group’s work. We have therefore established sub-groups in

Nuclear, Energy Storage, and more recently, Offshore Wind, which were identified as initial priority areas. These sub-groups are open to all LCICG members, but also bring in stakeholders from other relevant organisations. In the future, there may be opportunities for alternative types of engagement between LCICG and groups with shared interests, such as the Smart Grid Forum.

There are two tiers of membership, with 8 core members who engage in all of the Group’s activities, and 9 associate members, who engage when relevant. The Group was not
established as a public-facing body. The LCICG members make information available about current funding opportunities on their own individual websites. In addition, a separate low carbon funding portal enables individual innovators to search for opportunities appropriate to them.

LCICG does review its membership regularly and the sub-groups we have put in place will be reviewed in 6 months’ time, for impact and to consider whether to form further groups to cover other technology areas.

**Ofgem’s membership of LCICG**

The Committee suggests that Ofgem should be a core member of the LCICG. Ofgem is currently an associate member. The LCICG has recently discussed with Ofgem its membership position. Ofgem concluded that it should remain as an associate member. The rationale for this is twofold: Ofgem is a regulator and whilst it is highly influential, it is not a public sector-backed funder of innovation - a prime criterion for core membership. Because Ofgem has an independent role, it does not feel it can be involved in prioritisation of R, D&D spending by technology, a key role for core members. However, Ofgem does engage very constructively with the LCICG and attends all the Steering Committee meetings. It is also actively engaged in the TINA programme, where appropriate.

**Transparency and information sharing**

The LCICG’s published Strategic Framework provides transparency on how public sector-backed support for innovation is delivered and what the future priorities are. The Strategic Framework also builds on the TINAs to set out what LCICG members believe are the key innovation needs in each of eleven technology sectors over the remainder of the decade. The technology chapters of the Strategic Framework were informed by a series of industry workshops, as were the individual TINAs themselves.

The LCICG’s Strategic Framework was widely publicised and was launched by Gregory Barker at the Cleantech Innovate conference on 13th February, with a follow-up briefing and networking event held at the RSA in London on the 24th March, with delegates from across the UK low carbon technology innovation sector.

**LCICG member objectives**

6. The LCICG is the key tool for delivering the Government’s low carbon objectives, but there is a mismatch between the resources allocated by the Government and its level of ambition. We recommend greater ministerial engagement with the LCICG along with a better resourced secretariat. (Paragraph 48)

8. We recognise that low carbon innovation is a complex policy area. Innovators and their business and academic partners value long-term certainty of structures (and where possible, longer-term certainty on funding). It is imperative that DECC ensures effective coordination of existing programmes, regular interaction between funders to minimise the risk of gaps or duplications in support for innovation, and proactive communication with the UK innovation community. The current resource levels and
structure between the Government and the LCICG on low carbon innovation have not enabled this. The Government must reconsider how the LCICG or a reconstituted group can help to deliver low carbon innovation objectives. (Paragraph 54)

We agree that the LCICG is a key tool for the Government to deliver its low carbon innovation objectives, and so makes an important contribution to the Government's broader low carbon objectives. As the Report notes, low carbon innovation is a complex policy area, with multiple players (both public and private), different types of policy instruments, including market incentives as well as direct funding - all driving towards a shared ambition for the transition to a fully functioning low carbon economy.

The DECC secretariat is flexibly resourced and is able to call upon the wider resource of other members of the Group as necessary, for special projects such as the Strategic Framework and the TINAs. Following the Strategic Framework’s launch and in light of the Committee’s feedback and new tasks identified, DECC’s resource for the secretariat is to be increased to 1 FTE, and there will be active support from others across the LCICG membership for aspects of the secretariat role.

Ministerial engagement with the Group as a whole has taken place on a periodic basis throughout its existence, to provide strategic direction. Ministers will look at the scope for further involvement in the Group’s work.

Communication

7. The LCICG Strategic Framework should be the Government’s main way of engaging innovators for this complex policy area. Yet given that the NAO first reported in 2010 and again in 2013 that LCICG communications needed to improve, we were surprised and disappointed to hear witnesses express continual frustration at the lack of consultation and publicity surrounding the framework and its launch. We consider that a lack of staff for the LCICG Secretariat may contribute to the ineffective communication between LCICG and relevant stakeholders. The Department for Energy and Climate Change, along with other LCICG members, must develop a communication strategy which will strengthen their engagement with non-LCICG members in the wider UK innovation sector. The LCICG should proactively identify relevant parties and communicate with them regularly. (Paragraph 52)

9. To date communication has been ineffective. It is unsatisfactory that four years on from the NAO’s initial criticisms this remains a major concern. DECC must put more resource into managing the LCICG (both in terms of providing secretariat support and ministerial oversight) otherwise the potential for low carbon innovation to help meet important policy objectives such as reducing greenhouse gas emissions by 2050, as bound by the Climate Change Act 2008, will not be realised. (Paragraph 55)

LCICG’s primary purpose is to work together to coordinate present and future funding by the major public sector-backed organisations; it was not designed as a public-facing group. The 2010 NAO report did not include improved communications as an issue, nor did the
2013 report include it in its five recommendations. However, in light of the Committee’s recommendations, we are exploring additional private sector engagement opportunities.

LCICG have recognised the requirement and value in engaging wider industry and stakeholders in the development of its key outputs and the dissemination of them. This has included:

- TINAs were put together after considerable consultation with industry and academia, mainly through a series of more than 20 stakeholder workshops;
- The LCICG has its own website giving an overview of its work, plus useful links;
- The LCICG published its Strategic Framework earlier this year. The publicity for the launch of the Framework Document and the associated event went out very widely several weeks beforehand, as well as being advertised on the LCICG’s own website. 600 named individuals from key organisations were invited to the launch event, and over 140 attended it;
- The Funding Navigator - a low carbon portal, which was funded by DECC and developed by Innovate UK - allows businesses and academia to identify funding and collaboration opportunities. In 2013 it had over 80,000 hits, averaging close to 7,000 hits a month. The Knowledge Transfer Network, which manages the Navigator, has recently been re-launched and opportunities for developing the portal further are being considered;
- Many of the LCICG members (and the KTN) promote the LCICG independently at exhibitions and conferences and directly to businesses;
- In addition there are frequent bilateral and small group meetings between LCICG members and their stakeholders. These are not always branded as LCICG engagements but they are a key part of the members’ interaction with industry and academia.

As LCICG moves to a new phase of work, and taking into account the Committee’s feedback, we plan to further strengthen external communications as follows:

- Improve the Funding Navigator, to help signpost and guide innovators to funding opportunities;
- Facilitate introductions and networking opportunities for collaborators, both nationally and internationally;
- Maintain a close dialogue with innovators, funders and companies of all sizes, through government-industry forums and bespoke events; and
- Increase awareness and confidence in UK public sector support to innovation, through active promotion of LCICG’s funding programmes, via a range of channels.
Communication is one of four priority work-streams identified in the Strategic Framework.