Meeting Notes

Government/Industry Contact Group to support future development of off-gas grid heating

25 July 2018, 11:00-15:00

Wellington House, Starley Way, Birmingham Business Park, Solihull, B37 7GN

Attendees

Paul Rose (co-chair)	OFTEC
Aaron Gould (co-chair)	BEIS
Aaron Berry	DfT
Barry Gregory	Riello Burners
Colm Murphy	Firebird Heating Solutions
Guy Pulham	FPS
Hugh Tucker	UKPIA
Ian Waller	Consultant
Jennifer Pride	Welsh Government
Malcolm Farrow	OFTEC
Mark Bingley	Ecoflam Burners
Martin Cooke	EOGB Energy Products
Martyn Bridges	Worcester Bosch
Neil Sawers	Grant UK
Orla Gray (via phone link)	Northern Ireland Government
Regis Lopez	Scottish Government
Renee O'Cleary (Via phone link)	Northern Ireland Government
Roz Tandy	BEIS
Sophia Danes-Gharbaoui	BEIS
Terry Wyatt	Teddington Controls
Tim Lock	OFTEC
Tony Brown	FPS

Apologies

Guy Crabb	Guy Crabb Plumbing and Heating
Johnnie Black	Warmflow Engineering
Peter Davidson	TSA
Nick Hawkins	Deso Engineering
Ross Anderson	ICOM

Agenda Items

Item 1 - Arrivals and introductions

BEIS welcomed everyone to the meeting and introductions were exchanged.

Item 2 - Review of minutes and actions from the meeting on 3rd May 2018

The notes of the last meeting were reviewed. All actions from the previous meeting had been done and no comments were raised. It was noted that they were published on the gov.uk website.

Item 3 - Summary of responses from the Call for Evidence

BEIS presented an update on responses to the recent Future Framework for Heat in Buildings call for evidence. The majority of responses came from trade associations (29%), fuel suppliers (19%) manufacturers (18%), consumers 12% and installers 9%. BEIS explained how it had encouraged engagement and noted that more input from consumers and installers would be helpful and that measures would be put in place to achieve this going forward.

Industry advised that social media was a useful vehicle for engaging with installers.

Industry enquired whether any environmental groups had responded to the call for evidence. BEIS replied that no environmental groups have presented views on the off-gas grid to BEIS

BEIS advised that in many cases the responses contained more opinion than hard evidence and then went through a presentation on the responses to each question, the key points of which were:

- Two thirds of respondents favoured regulation and the majority of responders wanted government to provide a clear framework as soon as possible to enable the development and implementation of low carbon solutions, and encourage private investment, against a backdrop of certainty. Some respondents would welcome a firm end date for the use of high carbon fossil fuels but with any change deferred to allow solutions to be deployed.
- A whole building approach was advocated by some respondents to ensure a clear connection between heat demand and supply.
- 84% of responders felt that some further incentives or subsidy would be necessary to encourage the required changes. There was also support for some form of obligation, but no one model for an obligation was widely supported by respondents.
- Arguments were made for a range of low carbon technologies would be needed to meet the needs of a wide range of building types and heat pumps and bio-fuels (liquid and gas) were the preferred options to decarbonise off-grid homes. However, it was noted that both present challenges requiring further research or actions. In the case of heat pumps the biggest concern was the high capital cost; in the case of biofuels there was concern about sustainability, availability and whether they were truly a drop-in replacement. Two thirds of respondents opposed the use of storage heaters.
- The potential of other technologies such as hybrids and for further technical innovation was highlighted in some responses (Industry noted that hybrids should not be considered an interim solution and that, for hard to treat buildings, system using a heat pump with a small boiler running on bio-fuel would provide a flexible, highly efficient solution).
- The main considerations about technologies were summarised as:
    - Acceptability to consumers
    - Cost
    - Carbon saving
    - Fit with heat strategy to 2050
    - Long term deliverability
    - Potential to scale.

- There was agreement that consumer wellbeing was crucial in determining the best options.
- There were differing views on whether government should support particular technologies or remain technologically agnostic, and it appears there are different ideas of what it means to be 'technology agnostic'.
- There were also differing views on when installations of high carbon heat should end.
- There were mixed views about whether staged solutions were a good thing – some felt they can be a distraction.
- The data on the suitability of off-grid housing stock for low carbon heating had still not been released and was held up pending an independent third-party review.
- Responders identified the need for a wide-ranging BEIS-led consumer communications campaign.
- A skills-gap was identified as a problem; responders felt there was a need for a new mandated qualification and standard for renewables, higher and more consistent installation standards for heat pumps and better enforcement. Similarly, many commented on the need for comparable expectations to be set for all wet central heating systems irrespective of the heater.
- There is interest in innovation over delivery models for low carbon heat, such as heat-as-a-service or green mortgages. The opportunity for better local delivery was also noted, but concern had been raised about whether local authorities had the capacity to assist delivery.

During the presentation there was some discussion about how much biofuel would be required for transport and whether sufficient would be available for off grid heating. DfT noted that forecasts suggested the demand for diesel would remain high for much of the 2020s and that, because the bio-fuel content in diesel was increasing, demand for biofuel would double by 2020.

BEIS concluded the presentation by stating that, despite the call for evidence, some gaps remained in some key areas, including the potential of bio-energy to be deployed across the economy as a whole (including transport and electricity), and the commercial potential of hybrid heat pump systems. BEIS is commissioning further research in this area, with a particular focus on the technical challenges and costs associated with the switch to low-carbon heating, and an evaluation of some of the specific challenges associated with switching to bio-energy based fuels. Technologies in scope of this research cover electrification technologies such as electric boilers and electric panel heaters and bio-energy based heating. The formal response to the call for evidence would also be published, possibly in the autumn, and may be followed by further consultation on policy options for decarbonisation.

Industry thanked BEIS for the update.

<u>Item 4 - 'Buildings Mission' announcement</u>

BEIS informed the group of the Government's 'Grand Challenges', set out in the Industrial Strategy and that, under clean growth, the aim was to halve the energy use in buildings by 2030, compared to current new builds. There was also a desire to halve the cost of renovating existing buildings to the same standard as new builds. There would be a particular focus on construction, building fabric, and the use of smart technology.

The delegates from Scotland and Wales were invited to comment on the situation in their countries:

- The Scottish government is moving to one programme called Energy Efficient Scotland. Good progress was being made by building alliances to share knowledge with other

countries, particularly in Scandinavia. For example, they are examining whether aspects of the Danish strategy could work in Scotland. Currently, there is a strong emphasis on developing district heating schemes, with consumer protection safeguards on cost and performance built in. Seminars were also being held with local authorities.

- In Wales there had been limited work on heat so far, but decarbonisation targets had been announced and a consultation was underway, with responses needed by 4th October see: https://gov.wales/topics/environmentcountryside/climatechange/emissions/?lang=en Work was underway to develop a place-based approach to ensure the particular needs of Welsh residents were met.

Item 5 – OFTEC biofuel pathway

OFTEC presented an example of a possible pathway for the decarbonisation of oil heated homes by the gradual deployment of bio-liquids. The purpose of this was to illustrate that, if rolled-out gradually, bio-liquids had the potential to largely decarbonise the sector by 2050. It was stressed that other potential pathways would also be considered, and that other developments - such as improvements to building fabric – would enable even faster carbon reductions to be achieved.

A further discussion about the competing needs of heat and transport for low carbon liquid fuels occurred. It was broadly agreed that it may be necessary to consider which use would provide the best use for low carbon liquid fuels if there was insufficient to meet all needs. In particular there was concern about the availability of waste-derived fuels.

Item 6 - Overarching framework and regulation

BEIS officials confirmed that there was a clear consensus that this was necessary and important to provide industry with the clarity needed to develop solutions. A consultation on the way forward is being planned for 2019.

Industry stated that managing the availability of biofuel was an industry matter and that government should set out its framework and targets and then let the market drive its implementation, assuming this could be done affordably. It was noted that the biofuel market was not yet mature and that as it developed further, particularly if transport demand dropped slightly, then price would become more competitive.

Industry was confident that it could provide a mechanism to ensure compliance during the roll-out of low carbon liquid fuels. However, if industry was unable to deliver this, then other technologies would then prevail.

Item 7 - Technology / fuel options

The group divided into two smaller groups to discuss overall impressions of the responses received to the BEIS' call for evidence and to identify further areas for exploration.

The discussions were wide-ranging, but broadly covered the areas of supply and demand for biofuels, costs to consumers, air quality impacts and the strategic priority for biofuels in the future of heat. The following key points were mentioned in response to questions from BEIS:

- The group felt that no additional installer training would be required in the switch from oil to a blended biofuel (e.g. B30K or B50K). Changeover could potentially coincide with normal boiler servicing, and would take no more than one day.

- The higher the bio content of the fuel (e.g. closer to 100%), the greater the risk of residues and waxing on the inside of tanks, but this could be mitigated by some training for heating engineers. The group estimated that this kind of training may be needed for in the region of 15,000 installers across the UK.

- Consumers may be positively impacted by changes to storage regulations for biofuels compared to fossil fuels. For example, no requirement (cost, space) for fire protection of tanks

- The group felt BEIS could do more to exploit the synergies between the transport industries (particularly aviation) and heating fuels. BEIS were referred to the UK PIA for more information on biokerosene supply chains.

- On the economy/job creation, the group advised a gradual phasing in of fuels with higher bio content to give industry time to react.

- On air quality, the group reported that low-NOx emission appliances are being rolled out this September, which should ensure up to 50% reductions in NOx compared with 5 years ago. The group also raised that industry would need an incentive (either regulatory or financial) to work on emissions reduction and will need sufficient certainty from government to commit to R&D and innovation.

BEIS expressed that they were grateful for the groups' input to these discussions and will take members' points back to consider.

Item 8 – Review of actions / next steps

- BEIS to circulate presentation on outcomes of Call for Evidence (note – not for wider circulation[1]).
- Industry to form a sub-group to co-ordinate development activity between main meetings.
- BEIS to set out the main principles under which future decisions will be reached.
- BEIS to publish an evidence framework which sets out the criteria for the provision of information.
- OFTEC to supply BEIS with the documents produced during the B30K biofuel field trials in Norfolk during 2010.

Item 9 - Date of next meeting

The next meeting is confirmed to take place in October (date and location TBC)

With no other business, the meeting closed at 15:00.

The slides represent a work in progress and should not undermine the official response to be published later this year. In the interests of transparency, stakeholders viewing these minutes on gov.uk can contact BEIS for more information at buildingheat@beis.gov.uk.