



Minutes of OFTEC Members Decarbonisation Meeting
Tuesday 02 March 2021, 10:00 – 11:20am
by video conference call

Present:

David Blevings	(DB)	OFTEC Ireland Manager	(Secretariat)
Malcolm Farrow	(MF)	OFTEC Head of Public Affairs	
Paul Rose	(PR)	OFTEC CEO	(Chair)
Tim Lock	(TL)	OFTEC Technical Director	

Alessandro Rubboli	Ariston Thermo Group
Christopher Bridge	Kingspan Water & Energy
Colm Murphy	Firebird Heating Solutions
Darren Beale	Bosch Thermotechnology
Dean Mitchell	SPX Flow Europe
Denis Breen	Firebird Heating Solutions
Emanuele Turco	Ariston Thermo Group
Erica Furin	Ariston Thermo Group
Ewan Sutherland	Bosch Thermotechnology
Gerry Jones	Dunraven Systems
Giles Atkinson	Atkinson Equipment
Giuliano Conticini	Ariston Thermo Group
Graham Barker	Riello Burners
Ian Henderson	Warmflow Engineering
Ian McCreeth	Anglo Nordic
Johnnie Black	Warmflow Engineering
Jonathan Kane	Kane International
Judy Hadden	Oil Spill Insurance
Ken Cronin	UKIFDA
Kenny Maxwell	Teddington Systems
Mark Bingley	Ecoflam (Ariston Thermo UK Ltd)
Mark Doyle	Firebird Heating Solutions
Mark McElroy	Danfoss
Martin Cooke	EOGB Energy Products
Martyn Bridges	Bosch Thermotechnology
Niall Fay	Grant Engineering (Ireland)
Owen Boardman	Bosch Thermotechnology
Paul McGuckin	Firebird Heating Solutions
Richard Holloway	Bosch Thermotechnology
Rob Terry	Centre Tank Services
Sean Keleher	Navien UK
Stephanie Doran	Kingspan Water & Energy
Stephen Grant	Grant Engineering (Ireland)
Terry Wyatt	Teddington Systems
Tony Brown	UKIFDA

1. Chairman's welcome

PR welcomed all to the meeting and updated Members on housekeeping.

2. Compliance with the Competition Act

PR reminded Members that everyone was required to comply with the Competition Act and made reference to the paragraph that went out with the meeting agenda.

3. Meeting objectives

PR outlined the purpose of the meeting which was to update all Members on where we are with decarbonisation with a focus on:

- Policy Landscape
- Technical work ongoing
- Opportunities and challenges
- Consumer messaging

PR introduced Ken Cronin (CEO of UKIFDA) who gave a brief update on his position/background.

4. GB policy landscape

MF gave a high-level overview and a synopsis of key points:

- We are at a crucial point in UK's decarbonisation journey.
- Since Clean Growth Strategy 2017 BEIS has been in information gathering mode. CCC, its main advisor has published a range of reports and BEIS itself has commissioned several studies.
- The purpose of this work is to piece together the future policy plans and influence heat policy.
- Neither BEIS nor CCC are technology neutral – they already think they know the answer: electrification plus possibly Hydrogen – so their research is biased towards these technologies, e.g. £15M Electrification of Heat Demonstration Project.
- The scale of this challenge should not be underestimated - decarbonisation is moving from the general – e.g. infrastructure in the background - to the personal, affecting directly how we live. Cost and fairness are major factors.
- CCC – claim average home conversion to HP cost £10K – however, off grid EPC E-G homes much higher; £20K - £30K.
- Off-grid key target for 2020s but policies not in place – heat in buildings strategy due this month. We should be under no illusions - it will be bad news for our industry and will include proposals for both regulation and incentives to phase out oil.
- However, not all bad news – there is still a place for liquid fuels. National Grid FES suggests 600K – 1m homes cannot use HPs due to cost of network upgrades (affects not just heat but electrification of transport too).
- CCC concede in their balanced pathway that 900k homes may require a non-electric solution, although they favour HP hybrids.

- Consultation and future policy engagement – our submission must be clear and credible – but most of all it needs to show how it will deliver the government's own ambitions.
- We can't stop the heat pump juggernaut, but by getting foot in the policy door we keep liquid fuels in play and, given the challenges of deploying HPs, there may end up being far more liquid fuel in use than current policy theory suggests.

5. Ireland policy landscape

PR introduced DB who gave an update on the situation in Ireland:

- NI - Around 14% of NI's total CO2 emissions are from domestic heating with oil having a 60% market share (500,000 homes).
- NI is a devolved administration and can establish its own energy strategy. NI has a target of 80% reduction by 2050, with an interim target of 35% by 2025, but this is not set in legislation.
- A new Energy Strategy for NI is currently being developed and OFTEC is party to the ongoing process having a seat on the Heat Policy Working Group.
- To date the group has agreed not to recommend a date for phasing out oil or gas but is keen to support a ban on coal. A clear strategy for a separate solution for on grid vs off grid is developing with electrification and biogas being proposed for on grid and electrification (if suitable) and biofuels/biomass for off grid.
- Key supporters for biofuels are the NI Housing Executive who openly stated that off grid they have no viable alternative for liquid fuels currently.
- There is an obvious nervousness in the Department about a one size fits all approach following the RHI debacle (which is to our benefit).
- Currently the Department are costing the various options from high electrification through to no change and including biofuels in the mix. The natural gas industry is proposing a biomethane blend at 20% by 2025 with a view to hydrogen post 2030 but there is a lot of scepticism that hydrogen will be available by then.
- Once these costings have been completed by RICARDO they will be put in front of the heat policy group with a view to making policy recommendations to the Minister post Easter 2021.
- In terms of lobbying we have already engaged with numerous MLA's and this month we are circulating a new infographic and video that is being sent to all MLA's in March to make sure they are aware of the opportunity that HVO presents with a view to them making representation to Minister Dodds to include biofuels in the future energy mix.

In the Republic of Ireland....

- The residential sector was responsible for 10.2% of Ireland's total Greenhouse Gas emissions in 2018. The Republic is required to reduce greenhouse gas emissions by 30%, from 2005 levels, by 2030 and in its Climate Action Plan 2019 it set out its stall to reach net zero-carbon emissions by 2050.
- This is highly ambitious, and we have seen little detail on how this can be achieved and one of the standout problems is that agriculture accounts for one-third of Ireland's emissions and little or no commentary has been raised on how this is to be reduced.
- On heating, oil accounts for 37% of all homes, just under 700K.
- Climate action plan proposes a ban on the installation of new oil boilers by 2022 and gas by 2025 and plans to retrofit 500,000 homes to a B2 BER Standard by 2030.

However, the Climate Action Plan is prescriptive, with little guidance on transitions to this lower carbon society.

- We are starting to see signs of ‘concern’ in that Department of Public Expenditure secretary general, Robert Watt said the plan to retrofit 500,000 homes to a high energy standard and install 600,000 heat pumps instead of oil and gas boilers was “not affordable”.
- In addition, we had tried to talk to SEAI about biofuels in early 2020 to be rebuked but were contacted by SEAI to host a chat with boiler manufacturers pre-Christmas on biofuels.
- Conversations with Maire Donnelly, Chair of Renewable Energy Ireland (and now on the Taoiseach’s Climate Action Team) suggest they (Government) need to look at all options to reduce carbon emissions – we view that as a positive comment.
- AECOM independent report finalised stating biofuels have a key role to play in the future decarbonisation of the Irish energy sector.
- We plan to engage with Red Flag (Dublin based lobbying firm) to issue the report to all TD’s and senior civil servants with follow up engagement to advise them of the opportunity biofuels offers for carbon reduction now.
- We already have a financial commitment from Fuels for Ireland to match fund the cost of this work and a plan will be put in front of PR for approval next week and lobbying started mid-March to start engagement with TD’s – this work will focus on demonstrating the immediate carbon reductions that can be realised while keeping constituents on side without the need for major retro fit works.

6. Possible future liquid fuel markets in UK & ROI

TL presented a model that had been developed to indicate what the market for liquid fuels could look like over the next fifteen years. This pathway (UK) was based on 65% of current liquid fuelled boilers moving across to HVO and 35% to air source heat pump. The rationale behind the model was based on EPC data – homes in bands A-D could transfer to a heat pump and the remainder transferring to HVO.

The model shows a demand for approx. 1.3M tonnes of HVO by year 15 and the UK market decreasing from 1.5M boilers to c. 1M units.

A similar model was created for the Republic of Ireland and this was based on a 75% retention for liquid fuels. The model shows a retention of 500K boilers and a demand for 600K tonnes of HVO.

See spreadsheet attached to minutes.

7. Fuel availability and financial factors

PR shared a slide from Greenea released in 2017 showing the current and potential HVO production capacity. At that time, it was predicted that HVO production would reach 6.8M tonnes by 2020. In fact, last year saw 7M tonnes of HVO produced and current predictions are that installed production capacity will reach 30M tonnes by 2025. (Slides attached to the minutes). PR commented that this was available production capacity and not volumes produced. Sustainable feedstock remained a concern.

The slides demonstrate clearly to Government that production of HVO is increasing in line with global interest. PR reported that NESTE (main EU producer) has given an undertaking to

assist us with communications with Government to give information on feedstock and availability, and the levers required for upscaling production.

PR gave an update on the current financial situation with HVO. It currently is imported as a transport fuel and attracts a gasoil duty of 11.14ppl and VAT is at 5% when utilised for heating purposes. HMRC believe it is a hydrocarbon, hence the duty and legal advice is being sought on potential challenge.

PR reported that HVO benefits from inclusion in the Renewable Transport Fuel Obligation and as a renewable fuel can benefit from a 50ppl certificate from Government. As the NESTE product is from a certifiable waste source it further benefits from another 50ppl cert. These certs are traded by the importer and can reduce the cost by 100ppl. The Department for Transport manage these certs and to date, have not engaged with us and have passed the 'buck' to BEIS as the department that deals with the decarbonisation of heat. We are reviewing previous RHI schemes with a view to approaching BEIS with a proposal to enable these certificates to be redeemed if used for heat to enable lower cost product for end users.

8. Update on HVO demonstrator sites

TL gave an update on demonstrator sites. There are currently nine sites with boilers currently using HVO with the first sites converted during Nov 2020. The sites are in Cornwall (4), Midlands (2), South Wales (2), and North Wales (1) with plans for another 6 to come on stream within the next month in Glasgow, South Wales, Lincolnshire, and Cornwall (3). All sites are operating with replacement fittings – bio friendly filters, fuel lines, de aerators and tanks cleaned. A regimented inspection regime is ongoing. There is mix of internal & external appliances, condensing & non-condensing and yellow flame & low NOx burners. Most sites are running on 100% HVO but two are running on 85% & 90% blends having left a small amount of kerosene in tank prior to filling with HVO. No major issues have been reported to date.

In addition, there is a further site in Cornwall where a vaporising cooker is now running on HVO having had the sleeve burner replaced with a pot burner conversion. Again, no major issues have been reported to date.

9. Technical updates

TL gave an update on technical issues and the salient points are:

- EN15940 – standard does not cover heating applications. OFTEC have asked for the scope to be extended to include heating applications. Working group now established to look at this scope and looks likely that the scope will be extended.
- OFCERT – until above is extended. OFTEC would propose that OFCERT scheme would be utilised to certify products for HVO use.
- Tank Standards – EN14431 – standard for plastic tanks has been under review for several years. It was initially planned that the scope would be extended to cover blended biofuels – it has now been extended to cover all biofuels.
- Lab work has been completed with HVO on various components and materials – should give members data that will be useful for compatibility with their own products – this information is currently being formatted into an HVO handbook and plan to distribute to members soon for review.

- In addition, an HVO field guide is nearing completion – this will give advice to technicians in the field for conversion of installations.

10. Funding opportunity for national trials

PR suggested that progress to date was good with the demonstrator sites, but a larger field would be beneficial to demonstrate how HVO can work and give confidence to Government and consumers. PR suggested a trial of 150 homes would give a 95% certainty rate for robustness and he was currently looking at an opportunity to acquire funding from BEIS under the Energy Entrepreneur Fund that is open to any project that contributes to net zero. OFTEC has registered an interest to apply and proposing to put 5 villages (30 homes per village) on HVO. Currently working up the application.

11. Industry alignments required

PR reminded Members that BRE have calculated a carbon emission factor for HVO that will appear in SAP 10.1. The figure gives an 88% carbon reduction over kerosene. As part of the negotiations and discussions with BRE and Government, OFTEC has given an assurance that a conversion to HVO will require a significant technical change to the boiler – different combustion settings, HVO specific nozzles and other bio friendly components – in our opinion this will require, an HVO specific burner.

This is simply to address the concern of consumers swapping back to kerosene.

Bringing the meeting to a conclusion PR asked Members to:

1. Review their own equipment to check bio compatibility.
2. Confirm when biofuel specific product will be available with a view to announcing that the liquid fuel sector is ready in 2022 to offer an HVO specific boiler.
3. Support an industry wide marketing campaign to support the transition to biofuels.

DB 02/03/2021