Oil installer

News and views from an evolving heating world

In association with
www.oftec.org

Summer 2024 Volume 18 No 2

Take the hassle out of siting oil tanks!

With Atlantis fire protection barriers.

Simplify the process of positioning your oil tank near buildings by utilising fire protection barriers, which, when correctly installed, can fulfil building regulations for fire safety.

Use our handy online **fire barrier calculator** to get a panel selection tailored to your specific requirements.

Scan the QR code to learn more about the fire barriers and the installation process.

Why choose Atlantis Fire Protection Barriers?

- Easily installed with hand tools
- 30 minute fire rating
- Fully tested and certified to the correct EN Standards
- Can be fixed to standard non-combustible fence posts
- More convenient and simpler than masonry fire barriers
- Assembly instructions are provided with every kit
- Effective and economical way to comply with building regulations
- Cashback on all purchases through our trade portal

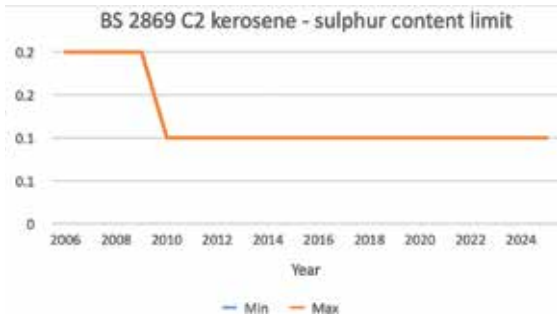
Scan the QR code to access our trade portal

Tel: 0330 999 1100
Email: sales@atlantistanks.co.uk
www.atlantistanks.co.uk

1% CASHBACK FROM TANK TO BANK

Atlantis

Table of Contents



A&D PUBLISHING

Oil Installer is published by
Ashley & Dumville T/A A&D Publishing
Registered in England No. 227716

Tel: 01565 653283
Visit us online at **www.oilinstaller.co.uk**

Advertising
Sales manager: Adrian Major
Media pack on request: adrian@oilinstaller.co.uk

News Desk
Liz Boardman: liz@oilinstaller.co.uk

Summer 2024 Volume 18 No 2

ISSN 1755 – 3490

The publishers gratefully acknowledge the support of those firms whose advertisements appear throughout this publication. As a reciprocal gesture we have pleasure in drawing the attention of our readers to their announcements. It is necessary however for it to be made clear that, whilst every care has been taken in compiling this publication and the statements it contains, the publishers cannot accept responsibility for any inaccuracies, or the products or services advertised.
Printed by Stephens & George Print Group. Tel. 01685 388888

Need help or want to give us feedback? We're listening...

One of the biggest criticisms I hear of OFTEC is that it is too remote from the daily work of the heating professionals and not sufficiently focussed on supporting the needs or wants of technicians. I want to reassure you that we're working hard to ensure the services we provide are as good as possible.

These are not just hollow words but it's not always as easy as it sounds. Competent Person Schemes must operate within rules set out by government, so we often have to do things in a particular way, regardless of whether we or you like it. Understandably, that can lead to frustration and that's why feedback is important. On page 12 you can read about the new technician group we have set up to provide a sounding board for feedback and ideas to make our service better and identify problems.

We also welcome feedback from you, and there are a number of ways in which you can do that. As well as phone and email, those of you who are active on social media may have noticed that we have significantly increased our presence on Facebook recently. This includes launching a new Facebook sub-forum just for OFTEC registered technicians, which we hope will make it easier for you to get answers to questions and discuss any issues you have.

A frequently voiced concern is over the slow development of new digital services. This is understandable and something we want to deliver. However, the reality is that other things have had to come first, in particular the fight to secure the long-term future for liquid fuel heating. The HVO demonstration project (see page 6) and our ongoing lobbying work (see page 11) has cost OFTEC and the fuel distribution sector a huge amount - over a million pounds in the last five years. This is very much a work in progress and we're looking at options to expand this further in the coming months.

Paul Rose

Paul Rose,
CEO, OFTEC

Paula Shackleton clocks up 20 years!

Longevity and loyalty in any business is a good thing and this spring OFTEC celebrated one of its valued employees who demonstrates these qualities.

Twenty years ago, in April 2004 when Paula Shackleton was looking for a job in office administration, she decided to give OFTEC a go. So, while Britney Spears was top of the charts with 'Toxic' and Alan Shearer was still playing for Paula's beloved Newcastle United, Paula started working for OFTEC, not sure how long she would stick it out!

Roll on 20 years and Paula oversees all of OFTEC's registration administration functions, which have expanded significantly from initially just covering oil heating under the Government's Competent Person Scheme, to now including solid fuel and renewable technologies via more schemes like MCS, PAS2030 and TrustMark.

Paula comments: "I've seen many changes in my 20 years with the company, a lot of faces have come and gone, many of whom I'm still in touch with. I really enjoy working as part of the team and helping out our registered technicians where I can, as well as consumers, certification bodies and other departments in the organisation. I first joined as a part-time receptionist/secretary, looking for something local to fit around my young children. A position within the registration department came available very early on and the rest is history. And for anyone wondering "which one I am" , I am the only "northerner" in the team!"

New inspector for Bristol and Somerset

We welcome new regional Inspector, Gary Chandler. Gary lives in north-east Somerset and has 30 years' experience in the industry. Gary is a former soldier and an active member of the Royal British Legion. He is currently helping to reform the Paulton Branch of the British Legion. Gary is also a keen golfer and enjoys working on his allotment.

DESNZ MPs visit HVO demonstration project in Cornwall

In April, members of the DESNZ select committee visited the HVO demonstration project in Kehelland, Cornwall. The committee is currently holding an enquiry into 'heating our homes' and the purpose of the visit was to find out about renewable liquid fuels and the role they could play in decarbonising off-gas grid homes. Four MPs attended, Vicky Ford and Mark Pawsey from the Conservatives, and Barry Gardiner and Lloyd Russell Moyle from Labour.

As well as hearing from the team behind the project, the MPs visited several homes, the local school and church, and talked to local residents about their experiences. Needless to say, their feedback on HVO was very positive, and the many benefits of the technology and the genuine enthusiasm of the users, was powerfully communicated.

In terms of our campaign for renewable liquid fuels, this kind of real-world evidence is incredibly valuable, and to say the visit was a success would be an understatement. It was perhaps best summed up by Barry Gardiner, who said: "I have been doing this for 30 years and this is by far the best visit and presentation I have ever had."

We hope this will add weight to our efforts to get support for HVO.

Energy efficiency in listed homes and conservations areas

A recent review published by the Government has investigated the challenges faced when retrofitting in conservation areas and listed buildings. The review called 'Adapting Historic Homes for Energy Efficiency', which is part of the Government's commitment to reach net zero by 2050, investigated methods and solutions to remove barriers and improve energy efficiency in historic homes, cutting energy bills for households across the country.

Historic properties make up a significant proportion of the UK's building stock. With 5.9 million buildings constructed before 1919, these homes are disproportionally affected by the lack of available energy efficiency options due to issues such as planning permissions and building restrictions.

Historic England's Local Authority Staffing Survey (2023) found that owners of listed buildings and homes in conservation areas wanted clear advice on insulation, boilers and heating systems, heat pumps, draft-proofing, replacing or adapting windows, and installing solar panels.

Through cross-government and stakeholder engagement, the review identified several themes that required further attention and should be seen as enablers of effective historic homes retrofit, including:

- The planning system.
- Local authority skills, training, and capacity.
- Guidance and information.
- Construction industry skills, training, and capacity.
- Affordability and financial incentives.

The review was developed in partnership with the Department for Levelling Up, Housing and Communities, Department for Energy Security and Net Zero and the Department for Culture, Media and Sport, supported by Historic England. There are a number of next steps that have resulted from the review and are available here: Adapting historic homes for energy efficiency: a review of the barriers - GOV.UK (www.gov.uk)

fsb
Federation of Small Businesses

Federation of Small Businesses – discounted membership

OFTEC registered businesses can now save 10% on FSB annual membership.

Federation of Small Businesses (FSB) was established in 1974 to support all small businesses in the UK. Operating as a non-profit making organisation that's led by its members, for its members, FSB offers a wide range of vital business services to protect and support small businesses and people who are self-employed:

- 24-Hour legal advice helpline.
- Access to funding.
- Employment protection – up to £100k.
- Insurance services.
- PR and crisis management.
- Legal protection insurance – up to £100k.
- Cyber protection.
- Tax investigation protection – up to £100k.
- Debt recovery services.
- Legal hub – 1400 factsheets, guides & templates.
- Lobbying and networking.
- Payroll and pensions.
- E-Learning product training.
- Health and safety advice.
- Business banking.

For an annual fee starting at 55p per day, FSB membership provides complete piece of mind for small business owners and the self-employed. It offers a host of essential business services, as well as protection and national representation at government level. From day one of membership, you'll have access to benefits, including a free legal advice line manned by a team of specialist solicitors 24hrs a day, 365 days a year! FSB membership provides incredible value for money, with the legal services worth the annual subscription fee alone.

To find out more view the benefits of registration page on the OFTEC portal.

HVO demonstration project provides pathway for fair and affordable heat decarbonisation of oil heating in UK and Ireland

After three successful heating seasons, OFTEC and UKIFDA are confident that their demonstration project has made a conclusive case for the use of HVO in heating. The results are set out in a detailed report on the industry-funded project, the current phase of which is now completed. The project focussed on the real-world use of HVO, so existing heating systems were utilised in the 126 homes and nine non-domestic buildings that participated.

The main goal of the project was to test the deployment of HVO in as wide a range of typical situations as possible. This meant selecting sites right across Britain and ensuring that a broad cross-section of appliance types was included. The test sites included both condensing and non-condensing boilers, combi boilers, system appliances and cookers.

Appliance output was typical of the types commonly used in the UK, with 38 between 10 - 20kW, 63 between 20 - 30kW and 22 between 30 - 40kW. The conversions were straightforward and typically involved the following steps:

1. Emptying and cleansing the fuel storage tanks.
2. Replacing fuel carrying components if not HVO compatible. For example, fuel filter, deaerator, fuel pump, etc.
3. Fitting a new HVO calibrated burner nozzle.
4. Calculating new combustion settings to achieve the required heat output.
5. Appliance commissioning.
6. Labelling of equipment to declare it had been converted to operate on HVO.

In the case of the cooker, the sleeve burner was replaced by a purpose-made pot burner. The conversion process for the sites typically took just over an hour and could easily be completed as part of a routine service by a technician.

All the appliances used in the project successfully operated on HVO with no reports of diminished combustion performance. Comparing measured boiler efficiency pre and post conversion to HVO, the aggregate differential ranged from negative 1.1% to positive 4.7% when compared to measurements obtained when the same appliance was fired on kerosene.

Carbon reduction

To demonstrate the full potential of HVO as a low carbon solution, 100% HVO was used throughout the project, resulting in a typical carbon reduction of 88% compared to kerosene. Not surprisingly, the homeowners involved in the project were extremely positive about it, relishing the way their emissions had been reduced with so little fuss or inconvenience. A further positive outcome is that all the learning outcomes will be included in OFTEC's HVO handbook.

From a heat policy perspective, this highlights that for households and businesses with existing oil heating systems, HVO provides a straightforward pathway to very significant carbon reductions by minimising capital cost and disruption – the two issues most likely to hinder the deployment of air source heat pumps, the UK and Irish Government's preferred low carbon technology for rural off-gas grid homes.

This point was made most powerfully in the Cornish village of Kehelland, where 17 homes were converted during the project. OFTEC and UKIFDA made detailed comparisons of the cost of HVO conversion against an air source heat pump, utilising an online installation calculator tool published by the UK government. The calculator included costs for any energy efficiency improvements recommended in the home's EPC as part of the heat pump conversion, so these were also included in the comparison. It meant that while the cost of HVO conversion was just a few hundred pounds, the average cost of fitting a heat pump and carrying out the recommended retrofit work was an eye-watering £23,940.

Running costs

Of course, running costs are a different story because HVO is currently a more expensive fuel than kerosene although, with the cost of electricity high in the UK, the difference compared to the heat pump options modelled was less than might have been expected. Indeed, in the highest electricity cost modelled, HVO came out ahead. However, the low carbon options were all more expensive than the existing fossil fuel, which currently makes heat decarbonisation a difficult sell to consumers for politicians and policymakers.

To counter this, OFTEC and UKIFDA have proposed changes to regularise the tax on HVO used in heating and the implementation of a fuel obligation scheme that would make the running costs for HVO much closer to kerosene. The use of blended fuels is also being actively researched. These proposals would enable policy makers to capitalise on this easy transition pathway to low carbon heating and ensure rural oil-heated households and businesses have the necessary technology choices they need.

OFTEC attending InstallerSHOW 2024!

OFTEC is excited to announce that we will be attending the InstallerShow again in 2024, which takes place at the NEC, Birmingham, from the 25th – 27th June. You'll find our stand in hall 5 stand A12. It's the place to come if you want to find out the latest about HVO and OFTEC's vision for a technology inclusive approach to decarbonisation, which recognises the diverse nature of the UK's building stock and the need for multiple heating solutions to achieve net zero.

The stand is also where we'll be promoting our heat pump training and assessments, which have been developed to meet the needs of heat pump installers and dovetail with MCS requirements. The cross-industry working group behind the courses included Grant UK, Kensa, Panasonic, Vaillant, Nationwide Training, Cert-Ain Certification and ERS Certification.

At InstallerShow we will be showcasing OFTEC's role as a one-stop registration solution for all off-gas heating technicians, whether you work in traditional or renewable technologies.

OFTEC's Head of Public Affairs, Malcolm Farrow, will be joining a panel at InstallerShow to discuss 'How do we solve off-grid heating?' – a great debate, not to be missed, at the InstallerPLAZA on Thursday 27th June (1:00 PM - 1:50PM).

We look forward to seeing you at InstallerSHOW 2024 in June.

Unscrupulous Welsh tradesman successfully prosecuted

Back in March this year Rhondda Cynon Taf County Borough Council notified OFTEC of a successful prosecution of Thomas David Frederick Richards, a solid fuel installer trading as South Wales Log Burners Ltd. The case was taken to court by Rhondda Cynon Taf County Borough Council after numerous complaints and a trading standards investigation.

With assistance from OFTEC, and following the installer's revocation of registration, the Council's public health, protection and community services director was able to secure a successful prosecution, which resulted in the Court imposing a significant penalty.

Mr Richards was instructed to pay a fine of £3,000 for the offences under the Consumer Protection from Unfair Trading Regulations (Payable in 56 days). At the request of Trading Standards, a community order for 12 weeks with a curfew 9pm - 6am and the fitting of an electronic tag for offences under the Fraud Act was carried out. Mr Richards was also disqualified for two years from acting as a director of a company and had to pay £1,200 compensation to the consumer.

The case was taken to court following numerous complaints and a trading standards investigation.

OFTEC compliance

OFTEC's compliance team works hard to ensure that all registered businesses and technicians uphold the highest standards. However, each quarter a few are suspended or have their registration revoked. This can be for various reasons and mean they no longer have the right to display themselves as OFTEC registered.

From the 16th January 2024 – 25th April 2024 there was a total of 8 businesses had their membership revoked*.

The revoked businesses are:

Company No.	Business Name
5713	1st Call 24/7 Limited
104554	Alan Rogers Plumbing and Heating
500277	Ask Tim - Oil Plumb Gas
2550	Barry Russell Plumbing & Heating
501518	Berman Property Solutions LTD
501263	D. Ingham Plumbing & Heating
4359	Norfolk Heating Limited
104204	R J Rooney Plumbing & Heating

* Businesses have the right to appeal decisions regarding any sanctions made by OFTEC..

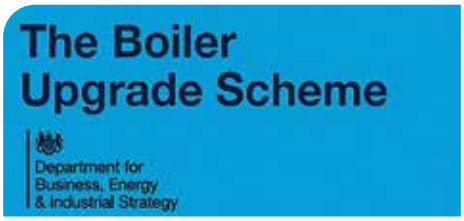
BUS scheme rules relaxed but OFTEC expresses concern

OFTEC has added its voice to those expressing concern about recent changes to the Boiler Upgrade Scheme (BUS) announced by the Government. The changes permit applicants to ignore previous requirements to install minimum standards of loft and cavity wall insulation building fabric recommendations that are included within their home's Energy Performance Certificate (EPC).

The Government has not revealed details of any research its undertaken on the impact of this policy change, and in taking this step has ignored the findings of its own consultation - over 75% of respondents actually supported retaining existing requirements on minimum insulation building fabric requirements.

The policy change is about driving heat pumps sales but breaks with the long-established fabric-first retrofit principle. This increases the risk of poorer outcomes for consumers due to more expensive heating bills and less efficient installations. OFTEC argues the requirements were there to protect consumers by ensuring their home was optimised for a heat pump.

Malcolm Farrow OFTEC's Head of Public Affairs



Risk of mis-selling

It also increases the risk of mis-selling. While reputable installers will specify the heat pump system correctly, even if that results in a more costly design, less scrupulous installers could use this policy change to dangle the carrot of lower prices, with little interest in the negative consequences of an underspecified system.

Even if the heat pump is sized correctly to cope with the heat demand, the owner will be left with an oversized heat pump should they later decide to improve insulation, potentially with poorer performance as a consequence. There is also a risk that any negative publicity resulting from the change could damage consumer confidence in heat pumps and hinder further uptake. Consumers will blame the technology when the reality is it's the poor installation.

Broader concerns

It also raises broader concerns about how far policy should go to incentivise heat pump installations and whether the benefits are being distributed fairly? For example, households benefitting from BUS grants are already better off than average, so is it right the taxpayers fund heat pumps in holiday homes - which is something BUS allows.

The BUS grants are already generous (BUS offers grants of £7,500 to help households switch to the low carbon technology) but some argue the Government should go even further in incentivising the switch. One trade body has proposed that heat pump owners should also benefit by paying a lower rate for their electricity, suggesting that taxpayers – who have already subsidised the install – should also subsidise the running costs too.

Malcolm Farrow, Head of Public Affairs at OFTEC said: "It's important that the wealthy are not rewarded disproportionally in the clean heat transition, or that less affluent households are left behind. We need to focus not on simply growing the heat pump market at any cost, but instead on achieving the most cost-effective solution in every location, by using all the options at our disposal.

"For buildings where heat pumps are less suitable, such as older off-gas grid homes, owners should be supported to switch to Hydrotreated Vegetable Oil (HVO), which offers an easy transition pathway to low carbon heating for little capital outlay".

Blue Flame, green homes.

The class-leading LCB700 Blue Flame oil boiler.

HVO-compatible with an A+ Energy Efficiency rating, the futureproof Navien LCB700 Blue Flame oil boiler is here to make homes greener. When used with HVO, you can reduce your CO2 emissions by 88%, and further lower NOx emissions providing a sustainable energy solution for years to come. It's easy to see why we're the leaders in Blue Flame technology.

Discover more at **navien.co.uk/professional**

NAVIEN

Firebird
The Future of Home Heating

Leading the Way in
Sustainable Home Heating

Firebird's HVO Compatible Boiler Range.

All our boilers are HVO Ready - a fossil fuel-free energy source with superior operational performance. Offering an extremely cost-effective alternative to other low carbon heating technologies - and a game changer in helping the UK achieve its net-zero carbon target.

HVO is a viable and sustainable drop-in replacement for Kerosene and could reduce greenhouse emissions by as much as 90%

Environment | Innovation | Technology

Envirogreen & Envirolite Boiler Range

The Most Efficient Boiler on the market

- HVO Ready
- Up to 97.5% Efficiency
- 25-30% Savings on Fuel Bills
- Easy to Service & Maintain

Available from your Local Merchant

t: +44 (0)1 752691177 | e: sales@firebird.uk.com | www.firebird.uk.com

Up to 10 year parts and labour warranty available

Future Ready Fuel campaign update

This year marks a new phase in our work to secure the long-term future for liquid fuel heating.

Our priorities remain to obtain support for the use of renewable liquid fuels in heating, through a financial mechanism similar to the Road Transport Fuel Obligation (RTFO), and by getting the duty on HVO aligned with kerosene. Both measures will enable HVO to be offered at an affordable price to end users.

Last year was our most effective yet in making the case for fuels like HVO, and we also succeeded in pushing back government plans to phase out oil heating from 2026 to 2035. However, readers should be in no doubt that government focus remains on electrification as the primary means to decarbonise heating. This is true in almost all regions of the UK, and in the Republic of Ireland. Put simply, policy makers believe that by 2050 the primary heating for most buildings will be electric, and that this is the only way to achieve net zero. Given that oil heating is a small part of the heating sector, as an industry we still face significant challenges in getting our message across.

Delays

We are particularly concerned that the Department for Energy Security and Net Zero (DESNZ) is delaying progress. Evidence from meetings and correspondence suggests that, far from being supportive of renewable liquid fuels, the department remains somewhat sceptical about the role fuels such as HVO will play. The promised consultation has been pushed back to September and, with the expected General Election adding uncertainty, we have had to take action.

OFTEC and UKIFDA arranged for MP supporters to send a joint letter to the DESNZ minister, Claire Coutinho, which was backed up with a separate letter from the trade associations, setting out at length our concerns and requesting a meeting. We also sent a detailed policy document to the Treasury, explaining the benefits of aligning the duty levied on HVO with kerosene, and asked that this be done as part of the Budget. MPs also supported this work, but as yet the Chancellor has not agreed to the change.

Alongside work with the Government, we are in direct contact with heat policy leads from Labour and the Liberal Democrats, with meetings taking place in an effort to influence their election manifestoes.

What's happening in Scotland, Northern Ireland and Wales?

The Scottish Government's consultation on proposals for its Heat in Buildings Bill closed in March. No consultation illustrates better the gap between what the Government is proposing, and what is actually practical, than this one.

The Scottish plan proposes to completely outlaw the use of any heating system that produces emissions at the point of use by 2045.

Future Ready Fuel

Any heating that results in direct emissions is termed a "polluting heating system" in the plans, so even the use of renewable liquid fuels will be banned. Conversely, heat pumps, electric boilers, storage heaters and other forms of direct electric heating are cited as examples of clean heating.

While it's theoretically possible to fit a heat pump successfully in almost any building, cost and practicality are a significant factor in remote rural parts of Scotland where, as elsewhere in the UK, the housing stock is often old and thermally inefficient. Worse still, the electricity grid will require considerable upgrading, costing billions of pounds. It's notable that the consultation says nothing about the likely cost to consumers and the last thing we want is for households to be forced to rip out wet heating systems and go back to storage heaters!

So, as we did for the recent Welsh Government's heat and buildings and net zero skills consultations, OFTEC and UKIFDA wrote a robust joint response. Political support in Scotland has also been forthcoming, with rural MPs and MSPs horrified by the plans, so we hope that a sensible compromise can be reached.

We will continue to engage constructively with both Westminster and all the devolved administrations around the UK to represent the liquid fuel heating industry and the needs of our customers.

You can read the latest policy news in Northern Ireland and the Republic of Ireland on pages 25 and 26.

OFTEC assessments - how are they developed?

When OFTEC develops a new set of assessments, such as for the recent heat pump scheme, there is a process to be followed. Contrary to popular belief in the wider trade, it's not just a matter of OFTEC staff members deciding how the assessments should be structured and what should, or should not, be included.

The main OFTEC board, together with the OFTEC Scheme Committee (OSC), will identify the area in which an assessment package will be developed. The OSC will ask OFTEC to put together a working group to look at this, and it is usually the responsibility of the Training Manager to identify suitable participants and invite them on to the group. The working group will then look at the Minimum Technical Competencies for the area of work in question - these set out the minimum competence requirements for organisations and individuals in a competent person scheme. It is normal to exceed these minimum competencies to ensure a robust assessment process.

Draft assessments are written, and we try and ensure that wherever possible, there is a large practical element and not just theory papers. The draft assessments are then trialled to identify any areas of weakness, any questions that are misleading (or simply incorrect) and, following this pilot process, alterations are made. It may be that a second, or even a third, trial is required before the working group is satisfied that the assessments are robust and fit for purpose.

At the same time, the working group will identify the equipment required by assessment centres to deliver the course. The whole process may take a matter of months, but usually, with the group meeting once a month, over a year passes before everyone is satisfied with the outcome.

Every part of the process must be logged and monitored, as the scheme will then be submitted to the United Kingdom Accreditation Service (UKAS) for its approval that the scheme is suitable for accreditation under ISO17024. This standard is the general requirement for bodies operating certification of persons. Once UKAS approval has been achieved, the certification bodies can apply for accreditation under 17024.

OFTEC does not run assessment centres – the centres that we work with are all either manufacturers, colleges, or independent training/assessment providers. The assessment process is monitored by certification bodies, and they are the ones that are accredited to 17024 standards and issue the certificates of competence. OFTEC works with seven certification bodies, and it is up to the assessment centres as to which one they choose.

From time-to-time, assessments will need updating - this may be due to a change in regulations, or feedback from centres identifying a particular question that candidates struggle with. In these cases, for small changes this will be carried out by OFTEC's training and technical departments; for larger changes the working group may be re-convened.

For any queries regarding OFTEC training and assessment, contact David Knipe or Simon Gray in the training department, and don't forget that you can find details of over 100 OFTEC approved centres on our website at www.oftec.org/technicians/industry-training/find-your-nearest-training-centre.

OFTEC technician forum

One of our objectives this year was to hold a forum for registered technicians so they could give us direct feedback on OFTEC's training and registration schemes. Outcomes will then be fed into the OFTEC Scheme Committee (Impartiality Committee) to recommend improvements or change.

The forum was held online during March and was attended by five registered technicians, one regional inspector and OFTEC staff. To ensure not one voice was dominant we tried to get a mix of technicians who carry out a wide range of work in liquid fuel, solid fuel and renewable technologies and from different regions.

Making up this group was:
- Simon from Yorkshire, who combines working on the tools with being a part-time trainer.
- Adrian from Scotland, who works on liquid fuel and is also MCS registered for heat pumps.
- Phil from Essex, who has been a registered technician since 2011.
- Padraic from Cork in the Republic of Ireland in his first year of registration.
- Dean from North Yorkshire also works in liquid fuel and heat pumps under MCS registration.
- Tim, a self-employed regional inspector for CPS, MCS & PAS2030 schemes.

We asked –

What do you get from your OFTEC registration?
Padric said he values the OFTEC reporting forms as a lot of his customers require official documentation. Simon said self-certifying work makes his customers compliant when their property gets sold. Phil said not many consumers are aware of the work OFTEC does or the logo and would like OFTEC to promote itself more.

Do you use the OFTEC technical helpline?
Adrian said the OFTEC technical books were useful to check measurements but did call the OFTEC helpline often. Dean said most of has installs are not complex and through the five-year training and assessment requirements he was relatively up to date on regulations. Phil uses the helpline just to double check things sometimes to be on the safe side.

Would OFTEC control documentation be useful if provided electronically?
Padric uses hard copy but would consider using an electronic equivalent if it was available. Adrian also uses hard copy and has not considered going digital just yet, while Dean already uses an alternative digital offering. Simon will go digital if it becomes available while Phil is already using a digital system that he subscribes to that also provides a diary management system.

Have you seen the new digital OFTEC field guide and is it useful?
Tim says the feedback received from his inspections has been positive as the guide is not too wordy and easy to use. Adrian wanted to know if it could be used offline and OFTEC's technical manager confirmed that it could be downloaded to a device when connected and then used anywhere offline.

How was your last inspection experience?
Adrian had no issue being inspected, and Simon added that those who did have an issue probably had something to hide.

Phil had heard from other technicians that they did not like issues being raised to their customers. OFTEC's reply is that we have a duty to inform end users where non-compliance with building regulations is found as this could be a health and safety matter. OFTEC then has to have evidence and sign off the remedial work to allow the self-certification to remain in place.

This conversation then went on to OFTEC training courses and new entrants. Phil and Simon asked if the OFTEC courses are tough enough and could anyone pass in time? Does anyone fail?

Dean thinks some technicians choose their easiest job for inspections and that inspectors should be more selective. Tim (regional inspector) responded in that he always wants to see the most recent work completed before agreeing to the site to be visited.

Do you obtain work from the OFTEC website?
Simon can't recall getting a referral from customers using the OFTEC website, while Phil says all his work comes via word-of-mouth which Dean confirmed was his experience too. Padric had obtained a small number of referrals from the OFTEC website.

This conversation then went to discuss tradesman who falsely use the OFTEC logo on vans and websites. OFTEC asked if technicians knew this could be reported as the OFTEC logo is a registered trademark. Most did not know that, if reported, OFTEC can investigate these occurrences with Trading Standards.

All technicians reported to being very busy with a good supply of work and that it's a good time to be a heating technician. Dean says there is lots of repair work out there as consumer's financial situations mean appliance replacements are down.

Does OFTEC communicate effectively, and do you use social media?
All receive regular newsletters but only Adrian admits to reading anything, but then only skims over it. Since the Oil Installer magazine went digital less tend to read every article. Reminders of renewals from the registration team were considered useful as technicians are busy people.

Most are on social media but don't engage nowadays as a lot of rubbish is published. On the subject of OFTEC hosting its own Facebook group in the future, purely for bona-fide registered technicians, this was considered a good step forward.

What can OFTEC do better?
- Simon would like the entry criteria for unskilled people taking OFTEC assessments toughened up.
- Padric would like OFTEC to make the public more aware that OFTEC registered technicians are trained competent people.
- Adrian asked if appliance warranties could only be valid if installed by a registered technician.
- Dean asked for OFTEC to have a greater presence on social media.
- Phil asked about improving isolation systems on oil storage tanks.

All of the suggestions will be discussed internally and responded back to group and updated in future editions of this magazine.

If any registered technician who like to take part in future forums please email alightwood@oftec.org

BURNING CLEANER TODAY FOR A GREENER TOMORROW

HVO READY

Low NOx EKL LN

Ultra Low NOx EKL BLUE

CUTTING-EDGE BURNERS TO SUPPORT SUSTAINABILITY AND ENERGY TRANSITION

HVO is a 100% fossil-free fuel produced from waste, residue oils and fats, which can be used pure or blended with other liquid fuels.

HVO is produced with no impact on the ecosystem and environment: a highly attractive and "green" choice for homeowners and companies.

HVO is a reliable alternative to traditional fuels without compromises in terms of efficiency or system adaptation costs.

Thanks to almost 100 years of experience in the design and production of burners ELCO, part of the Ariston Group, is a leading brand in the development of innovative, efficient and reliable burner technologies with a consolidated presence in the field of low NOx emissions. Wherever a small, medium or high power burner is required, ELCO is the best partner you can rely on.

elcoburners.uk@ariston.com

elco

Air pollution falls as solid fuel stove sales hit all time high

Andy Genovese of Hove Wood Burners explains why air pollution from solid fuel stoves has dropped over the last few years.

Since January 2022, all new solid fuel stoves sold in the UK must be certificated in order to be Ecodesign compliant. This EU standard, adopted by our government, raised base level efficiency of stoves to 75% and set limits on four significant air pollutants. Of these four, particulate matter, which is produced from several sources, e.g. road transport, combustion, industrial processes and domestic combustion (including emissions from solid fuel stoves and open fires), has been of signifcant concern.

Compared to 1990 levels, pollutants have decreased by over 40% and this can be attributed to a number of factors. Various surveys and fact-finding endeavours point to the popularity of wood burning over coal, smokeless and anthracite. The establishment of Woodsure (a quality assurance scheme for firewood) and the banning of domestic sales of bitumous or house coal, have played a part.

Popularity

The popularity of stoves over open fires is probably the single biggest contributor to this decrease. Open fires rarely achieve a net efficiency in excess of 30%, whereas stoves conforming to the new Ecodesign standards begin at 75% and some, such as Burley, achieve 90%+. This results in less loading, less fuel burnt, fewer particulates and a more satisfying user experience.

Despite figures from the Stove Industry Association showing record stove sales of around 200 000 in 2022, up 40% on 2021, particulate pollution accredited to domestic combustion fell by 4%. In fact, the average Ecodesign stove produces fewer particulates in an hour of burning, than the tyres of a family car produce in two miles of driving.

Information

Information is better than in the dark days of 1990. OFTEC began its competent person scheme in 2002, HETAS in 2005, while others such as NAPIT and NICEIC followed, creating a pool of knowledgeable engineers and fitters. DEFRA have published an England-wide Smoke Control Area map ending the reliance on individual councils. Organisations such as the SIA do a good job of turning complex statistics into easily digestible facts, rating stoves on a simple scale to allow consumers to assess the environmental impact at a glance, with its clearSkies scheme.

The message from this is clear: right stove, right fuel, accredited fitter

and good customer information can ensure solid fuel is part of a renewable clean air future and as the SIA state: "Last year this clearly showed that PM2.5 emissions from Ecodesign stoves burning dry wood fuel accounted for less than 0.1% of the UK total."

Andy Genovese trained in solid fuel in 2010 and has traded as Hove Wood Burners since then. Operating from his premises in Hove, Andy has three part-time employees. Self-taught, Andy has also trained four other installers and specialised in antique appliances for a while. He mostly operates in and around Brighton and Hove but has worked as far afield as South Wales, Cornwall and Birmingham.

Worcester Bosch launches new promotion for installers

Worcester Bosch has unveiled its FitMore Promotion, which is available to all installers on the company's Excelerate programme.

From 1st February – 31st August 2024, Worcester Bosch is offering installers the chance to receive up to £1,000 in gift cards.

To qualify, installers simply need to activate the offer and then install and register via Excelerate up to 10 additional Greenstar boilers or Bosch Heat Pumps compared to the same period in 2023. Worcester Bosch will then reward them for the 1st, 3rd, 6th, 8th, and 10th extra install.

The promotion applies to all Greenstar boilers (minus Greenstar 1000), heat pumps, and hybrids as well as the Condens 7000 WP.

For more information on the promotion and the prizes available, please visit the Worcester Bosch website.

Profileration of solid fuel standards

Andy Genovese of Hove Wood Burners discusses solid fuel standards.

Prior to 2022, combustion appliances (wood stoves to you and me) were passed through one and occasionally two national and EU standards. These were CE (the EU's 'product passport' allowing goods to be traded across the single market) and if the appliance met the smoke control legislation, DEFRA approval or exemption.

DEFRA helpfully provides a list of exempt appliances, although devolution has meant this list is UK country specific. The DEFRA standard concerns itself with smoke thickness (particulates) and CO output, but had the virtue of monitoring appliances both at low and high running. Some appliances are designed to operate efficiently when connected to a 5"/125mm liner/chimney and the standard is policed by local councils – in effect it is not policed at all but promoted by various industry bodies.

CE standard

CE was blissfully simple, it was a makers' declaration that the item was fit for purpose and a legal requirement from July 2013. Post-Brexit this standard has become a little confused. The UK Government imposed UKCA as a national (UK-wide) CE equivalent and then hurriedly added UKNI as Northern Ireland is in some senses still in the single market. Recent newspaper reports have suggested all three marks may be allowed to continue alongside each other.

Ecodesign

Ecodesign was a landmark, EU wide (adopted by the UK), directive that sets limits on particulates, hydrocarbons, CO and NOx gases produced by wood stoves. It also legislated an improvement on minimum net efficiencies of solid fuel appliances. It became mandatory, but not retrospective, in January 2022. It had the side effect of virtually killing off 'wet' or water heating appliances due to their failure to meet the emissions standards.

clearSkies

Early in 2022 the Stove Industry Association (SIA) launched a classification scheme for Ecodesign appliances noting that customers struggled to identify good from better.

Initially the clearSkies scheme ran from 1 to 5, with 5 being the best. It now runs from 2-5 and may be stretched to 7. It is probably the scheme with most manufacturer support and has the virtue of allowing you to evaluate an appliance via a single number. Level 5 is currently a 30% improvement above ecodesign limits. The clearSkies website lists approved products with scores.

Cleaner Choice

HETAS launched Cleaner Choice soon after Ecodesign became mandatory. Unlike the SIA's scheme there are no graduations. An appliance is either Cleaner Choice or it is not. The criteria are 50% better than the Ecodesign limits in the 3 or 5 tested criteria. The standard tests the appliances at both high and low running. HETAS provide a list of approved appliances.

Burley, a UK manufacturer based in Rutland, launched its own classification scheme with two new labels, Ecoexcel and Ecoelite. It has encouraged others to adopt it but at present this is only used by Burley. Ecoexcel is similar to clearSkies 4 and Ecoelite clearSkies 5/Cleaner choice.

None of these classifications or schemes replaces the others. They all run concurrently and are a mixture of mandatory and voluntary obligations, making picking through this blizzard of standards something of a challenge.

Andy Genovese trained in solid fuel in 2010 and has traded as Hove Wood Burners since then. Operating from his premises in Hove, Andy has three part-time employees. Self-taught, Andy has also trained four other installers and specialised in antique appliances for a while. He mostly operates in and around Brighton and Hove but has worked as far afield as South Wales, Cornwall and Birmingham.

Grant UK to appear at InstallerSHOW

Grant UK will be returning to InstallerSHOW on Stand 5C40.

Located next to the InstallerPLAZA, Grant's stand will feature the company's latest sustainable innovations, as well as a glimpse into its future product solutions. Alongside its award-winning Aerona^3 R32 heat pumps, smart controller technology, hybrid products and package solutions offering, the stand will also be home to some new products, which are launching later this year.

Product demonstrations will be hosted on the stand and visitors will be able to take a closer look at the range of products on display. There will also be the chance to win prizes and take-home giveaways, plus much more.

"We're really looking forward to InstallerSHOW," says Anna Wakefield, Head of Internal Sales and Marketing at Grant UK. "Not only will we be displaying our current product offering and doing demos, but our team will also be showcasing the support we can give to installers, helping them develop their businesses in the era of low carbon heating and net zero targets."

Firebird paves the way for sustainable living

The push for sustainable home heating has never been more crucial and Firebird has made substantial investment in creating fuel-efficient products that are also friendly to the environment. This innovation has propelled Firebird to the forefront with liquid fuel boilers achieving an impressive 97.5% efficiency and remarkably low NOx emissions – half the EU limits.

HVO

As part of its ongoing commitment to creating more fuel-efficient and eco-friendly solutions, Firebird has been championing the use of HVO as a biofuel for homes. Firebird boilers are fully compatible with HVO, a sustainable alternative to Kerosene that can reduce household emissions by up to 90%.

It's clear the demand for information has surged in the past year, particularly among heating professionals, whose interest is reflected in the demand for Firebird's boiler familiarisation courses at its Plymouth site.

The Envirocyl Quick Plumb Unit

On the new build and retrofit side of the business, Firebird's Envirocyl Quick Plumb Unit is growing in popularity amongst installers and homeowners. This cylinder meets all hot water needs and its fast reheat and high insulation values make it highly efficient. As the unit is pre-plumbed and wired, it can reduce installation time by as much as 70%.

The Quick Plumb Units are designed to work with the Firebird Enviroair Air Source Heat Pumps and will make installation quicker, saving both time and money. The Enviroair Heat Pumps are Nearly Zero Energy Building (NZEB) compliant, with a low running cost PCB controller and high-tech intelligent heating controls.

Underfloor Heating

Adding to the sustainable product range, is Enviroair Underfloor Heating, which is suitable for both new build and upgrade projects. Wet underfloor heating is the most efficient way to provide space heating as it is up to 25% more efficient than traditional radiators. Underfloor heating generally runs at around 45°C as opposed to 80°C used in radiator systems, saving on energy and running costs.

Worcester Bosch launches new hybrid heat pump

Worcester Bosch has launched the CS5800i Hybrid Heat Pump. Offering year-round, low-carbon comfort, the product offers homeowners instant heat, control and comfort by allowing a heat pump and boiler to work seamlessly together.

Co-created with input from installers and built for speed and simplicity, the new product pairs the pump with the intelligent CS5800i Hybrid Unit - ensuring that homes remain cosy and adapt effortlessly to customers' needs. By harnessing natural energy for everyday heating needs and switching to a boiler for extra warmth during chilly spells, the pump delivers electrified heating without losing convenience.

Designed for hassle-free installation without extensive system upgrades, the pump represents a significant step forward in responsible home heating

solutions. Combining efficiency, versatility, and ease of use, Worcester Bosch offers a future-flexible heating solution that meets the demands of today, while paving the way for tomorrow.

David Ford, Director at F&P Plumbing & Heating Ltd, said; "The new CS5800i Hybrid Heat Pump brings a new form of innovation to the home heating market. The unique design allows the low loss header to be installed to the rear of the boiler and in an external wall, eliminating any space issues when installing."

Martyn Bridges, Director of Technical Services at Worcester Bosch, commented: "The way we heat our homes needs to be flexible if we are to reach our net zero targets. Heat pumps will certainly play a huge part in this, however many homeowners are put off by the disruption and cost retrofitting properties to accommodate the technology.

"This is where hybrid systems can make their mark. By combining a heat pump with a boiler homeowners will ultimately see less disruption and won't need to adapt to a new way of heating their homes."

EVOLINK

HYBRID SYSTEM HUB

HOME HEATING EVOLUTION

Grant's newest addition to the hybrid range. EvoLink allows an Aerona heat pump to be connected to an existing fossil fuel heat source, including gas, oil, LPG or modulating biomass boiler.

- Immediately reduce a home's carbon footprint
- Install a heat pump alongside an existing heating system
- Cleverly adds supplementary heat using smart technology
- Choose preferred mode of operation - Green or Comfort
- Manual override facility to operate boiler when boost is required

FIND OUT MORE

GRANTUK.COM

Grant UK maintains its carbon neutrality status

Grant UK has maintained carbon neutral status in line with PAS 2060 for the third year running and continues to be a participant in the United Nations Climate Neutral Now programme. In 2023, Grant reduced its scope 1 and 2 emissions by further adapting its day-to-day business operations, demonstrating the company's ongoing commitment to operate as sustainably as possible.

Alongside its supply of low carbon heating products, including the award-winning Aerona³ R32 air source heat pump range, Grant has focused on reducing its carbon emissions as a business. With the Grant Project Zero sustainability programme, the company regularly reviews its operations and makes changes wherever possible to reduce environmental impact.

Since 2021 Grant UK has been part of the United Nations Climate Neutral Now programme. Working with an external carbon consultant, the company calculates its carbon emissions annually and aims to reduce these as much as possible by

introducing carbon saving measures. This carbon analysis covers Scopes 1 and 2 which include direct and indirect emissions including electricity, waste and fuel usage, and Scope 3 emissions which are indirect emissions through the supply chain.

Throughout 2023, Grant continued to implement its roadmap to reduce carbon emissions by making changes to its business operations. This included transferring more vehicles in its company fleet to electric or hybrid models, increasing the use of recyclable packaging and working closely with suppliers to minimise waste wherever possible. A combination of these activities alongside the changes Grant already made in previous years such as installing a 303kWp Solar PV system with battery storage resulted in the company reducing its Scope 1 and 2 carbon emissions by a fantastic 35% (210 tonnes CO2e in 2023, compared to 323 tonnes CO2e in 2022) and alongside Grant's continued support with overseas carbon saving projects, the company achieved carbon neutral status in 2023.

"We are incredibly pleased that Grant has maintained its carbon neutrality status for another year," comments Anna Wakefield, Head of Internal Sales and Marketing.

"We have also significantly reduced our scope 1 and 2 emissions in 2023 which is something we are proud of as a business. A huge thank you and well done to our team members for their ongoing support with the company's carbon reduction programme. We are in a sector which is working hard to reduce emissions and we strongly believe that this will be achieved not only through the supply of low carbon heating technologies but also by making important changes to business operations."

CIBSE approval for Grant

Grant UK's Air Source Heat Pump CPD seminar, which is available via its eLearning Academy, has gained approval from the Chartered Institution of Building Services Engineers (CIBSE).

The Grant eLearning Academy is home to a range of online training resources which are tailored to a variety of audiences including installers, engineers, merchants, consultants, architects and specifiers with a particular focus on renewable heating. In the dedicated learning zone for architects, specifiers, and mechanical and electrical (M&E) consultants, a free heat pump CPD seminar is available which has recently gained approval from the CIBSE. CIBSE members who complete Grant's online CPD heat pump seminar can now count this eLearning towards their annual CPD hours.

Grant's online heat pump CPD seminar provides an introduction to air source heat pump technology and how it works. The seminar also covers the topics of system design, heat pump sizing, correct design and installation protocols as well as covering the regulations and standards which affect heat pump installations. The online seminar also includes an explanation to understanding air source heat pump performance levels and estimating running costs.

Grant is also recognised as a registered CPD Course Provider by this qualification body. CIBSE works closely with its members and course providers to promote and support the careers of building services engineers through the accreditation of courses, approval of work-based training programmes and by providing routes to professional registration and membership. CIBSE members are required to complete a certain level of Continuing Professional Development by undertaking self-learning hours throughout the year and Grant's online heat pump CPD can now count towards annual CPD hours for CIBSE members.

"CPD content is an essential resource allowing for skills enhancement and keeping up to date with industry developments and best practices," comments Anna Wakefield, Head of Internal Sales and Marketing for Grant UK. "We are very pleased that our online heat pump CPD seminar, which is also approved by the Royal Institute of British Architects (RIBA), has been approved by CIBSE, allowing its members to learn about this low carbon heating solution while also working towards their annual CPD hours."

To access the content, visit www.grantelearning.com and use the enrolment key CIBSE2024 to sign up. The CPD will be available free of charge from the catalogue on your eLearning dashboard and course library.

RELIABLE...
ROBUST...
RIELLO
RDB

THE INSTALLERS No.1 CHOICE GENUINE RIELLO BURNER RIELLO RDB ERP 2018 & 2021 COMPLIANT THE INSTALLERS No.1 CHOICE

Riello RDB burners are the market leading residential oil burner and continue to be the customer's burner of choice, from installers through to main boiler manufacturers.

Riello R&D programs continually monitor and develop performance, implementing and enhancing updates using Riello *'know how'* and feedback from the field.

To protect future generations and align with global climate challenges, Riello has led the way in renewable fuel testing and offer fully compliant Bio Fuel & HVO options.

The Genuine Riello RDB – *THE* residential oil burner

Leaders in Burner technology for over 100 years

The RDB burner is the **No.1 installers choice**, it is trusted by **thousands of installers** with **over 2 million burners** sold into the UK and Ireland. The new ERP compliant Lo-NOx version ensures that Riello continues to offer the perfect match for all customers throughout 2024 and beyond.

Call us today on **01480 432 144**

HVO READY

RIELLO

Carrier

www. rielloburners.co.uk

* acording to expected future ERP regulations

Why carrying a personal CO alarm could save your life

Carbon monoxide (CO) is a silent killer; a colourless, odourless gas that can cause serious health issues or even death if inhaled in sufficient quantities. The risk of CO exposure is particularly high for professional tradespeople working in environments where the gas could be present, such as during the installation or repair of heating systems or in enclosed spaces where engines are running.

Carbon monoxide gas is produced by the incomplete burning of carbon-based fuels, such as natural gas, liquefied petroleum gas (LPG), oil, wood and coal. All fossil fuel burning appliances, including open fires, stoves, boilers, cookers and even BBQs, have the potential to give off carbon monoxide.

The consequences of CO poisoning

When humans or animals breathe in carbon monoxide the gas prevents their blood from transporting oxygen around their bodies. The consequences of CO exposure can be dire, ranging from mild symptoms like headache and dizziness to more severe conditions including loss of balance, vision and memory, unconsciousness and, in some cases, death.

Long-term exposure to low levels of carbon monoxide can also lead to neurological symptoms, including difficulty thinking or concentrating, or frequent emotional changes - for example becoming easily irritated, depressed or making impulsive decisions.

The Department of Health estimates that 40 deaths and 200 hospitalisations each year in England and Wales are caused by carbon monoxide poisoning. This risk underscores the importance of being equipped with an effective means of early CO detection, especially for engineers who are servicing boilers.

Life-saving technology

The SleepSafe Personal Carbon Monoxide Detector from Arctic Hayes is a device that combines functionality with life-saving technology. Its design is centred around the critical need for early detection, sounding an alarm when CO levels exceed 30 parts per million (ppm), a threshold where prolonged exposure can start to have harmful effects on health.

Continuous protection

The Detector features a long-life Li-ion Battery, with a 3 Year Sensor which ensures that the device is always ready for use, providing continuous protection without the need for frequent battery replacements. It is lightweight and compact and designed for on-the-go use. It can be easily attached to a belt, fitting seamlessly into the daily routines of professionals without adding bulk.

The Detector also features a loud 75dB alarm, which guarantees that the user is alerted immediately, even in a noisy environment, ensuring swift action can be taken to mitigate exposure. An LED Readout offers a clear visual indication of CO levels, enhancing safety through immediate feedback.

For heating engineers and other tradespeople, the SleepSafe Personal Carbon Monoxide Detector is not just a tool but a guardian against the invisible threat of carbon monoxide. Its rugged construction, with durable, shock-resistant casing, means it can withstand the rigours of everyday use in challenging environments. Whether at on site or at home, this detector provides peace of mind, knowing that you and your colleagues are protected against the dangers of CO exposure.

Hounsfield Boilers helps heat sustainable hotel

An 18th Century manor house is being redeveloped as a sustainable hotel and event venue and will be heated by a Hounsfield HVO-ready oil boiler.

Bronllys Hall is set in amongst the stunning landscape of a National Park in Powys, Wales. The venue will become a five-star boutique hotel with 40 ensuite bedrooms, and an entertainment venue. The building has been designed to be a low-to-zero carbon business and will be powered by a combination of solar, batteries and wind. The hall will be heated by HVO via Hounsfield Boilers' Tuscan external HVO boiler, which has just been installed on site.

Sustainability, efficiency, reliability

Hughes Architects, the company overseeing the project, knew there was a lot of space to heat and that it needed to be heated in a sustainable, efficient, and reliable way, so turned to one of the UK's HVO pioneers, Andrew Hounsfield.

Doug Hughes, Principal Architect and MD of Hughes Architects said: "Hounsfield's leading HVO technology enables HVO heating to work at a high capacity and be trusted to keep guests cosy during their stay. HVO is a highly effective way to solve the difficult issue of decarbonising heating and to deliver on our commitment to being sustainable and fits in perfectly with the ethos at Bronllys Hall. That aspiration is to showcase the best of British sustainable and renewable systems and technologies."

The Hounsfield Tuscan external boiler has a full load efficiency of 96 -97%, with an ERP rating of 'A'. The boiler is housed in a tough weather-proof case with a 20 to 25kW output. Inside, the boiler has all the high-quality features found inside Hounsfield's award-winning boilers.

An exciting project

Andrew Hounsfield added: "Bronllys Hall is an exciting project to be involved with. The range of sustainable technology being installed at Bronllys is inspiring especially as it's set within such an historic building."

"I am also very proud that the pioneering work we have developed with HVO fuels has been recognised, and that we are part of this wonderful project."

Bronllys Hall is set to become a top hotel, plus venue for events and conferences. The Hall is also intended as a showcase for UK homegrown cleantech innovation, whilst also giving confidence to commercial building owners and developers to seek and install renewable and sustainable integrated systems.

The HVO fuel will be provided by Oil4Wales from its depot, which is just three miles from Bronllys Hall, further helping sustainability by reducing fuel transportation miles.

Energy Management Solutions

Tank Guarantee*	HVO Ready	UKCA Marked**
10 YEARS		UK CA

TITAN EcoSafe® ESLP1200 Compact

*10 year warranty applies to tank only
**The UKCA mark applies to the primary storage tank
† Limited Time Offer
†† The number of slabs is required to meet OFTEC installation guidelines and adhere to Building Regulations (300mm clearance around the tank)

kingspan.com

Kingspan®

Can Northern Ireland lead the way for sustainable liquid fuels?

Every region of the UK needs to substantially reduce its carbon emissions to ensure our 2050 net zero target is achieved. In Northern Ireland energy policy is devolved and OFTEC believes the 'mood music' is positive towards sustainable biofuels for heating.

Currently, 526,000 homes in the region use liquid fuels for heating and, while the UK Government's current ambition is to transition most homes from fossil fuel boilers to heat pumps, in Northern Ireland this will not be feasible anytime soon.

Why do we say this? Well, for several reasons. At a recent meeting of the Northern Ireland Affairs Select Committee at Westminster, we heard from representatives of the electrical sector that it could take 'decades' to upgrade the infrastructure.

Furthermore, government acknowledges that to provide the 'Green Power' for the increasing adoption of electric vehicles, and to start to decarbonise the heating for homes and places of work, Northern Ireland needs to double its renewable generating capacity in the next ten years.

A huge challenge

With existing budgetary pressures across all departments this is a huge challenge for our Assembly.

While policymakers' attention is rightly focused on transitioning household heating to low carbon fuel sources, OFTEC's focus is on reminding them of the necessity to ensure the right technology is installed in the right homes to avoid the risk of unintended consequences.

We did that at the NI Affairs Committee and told the MPs present that if a 20% HVO/kerosene blend was introduced as part of the UK's RLFHO, it would see the UK meet its carbon budgets four and five (for heating), as the roll out could start immediately and would instantly impact all oil heated homes.

While heat pumps may be the answer for some, for a lot of homeowners they are simply financially unviable. At present, the average cost to the consumer of installing a heat pump and retrofitting a house is around £24,000.

A switch to a blended heating product would cost little (minor adaptations to burner and a biofuel compatible fuel line) if - and it is a big if - government introduced a renewable liquid heating fuel obligation (RLHFO), like the renewable transport fuel order (RTFO) for transport.

Ireland Manager David Blevings, at a recent meeting of the Northern Ireland Affairs Select Committee at Westminster.

We have already had some success in this area when George Eustice MP managed to get an amendment to the Energy Act last year.

As set out in Section 159 of the Energy Act 2023, the Government must undertake a consultation on implementing a Renewable Liquid Heating Fuel Obligation (RLHFO).

This needs to be done before the end of the current political term. An identical obligation has successfully incentivised renewable liquid fuels in transport since 2008, and RLFs supplied under the RTFO currently contribute a third of the savings required for the UK's transport carbon budget.

This mechanism is well understood by industry, and the supporting legislation is already written. All that is left is for the Government to push the button on the consultation and get the process moving.

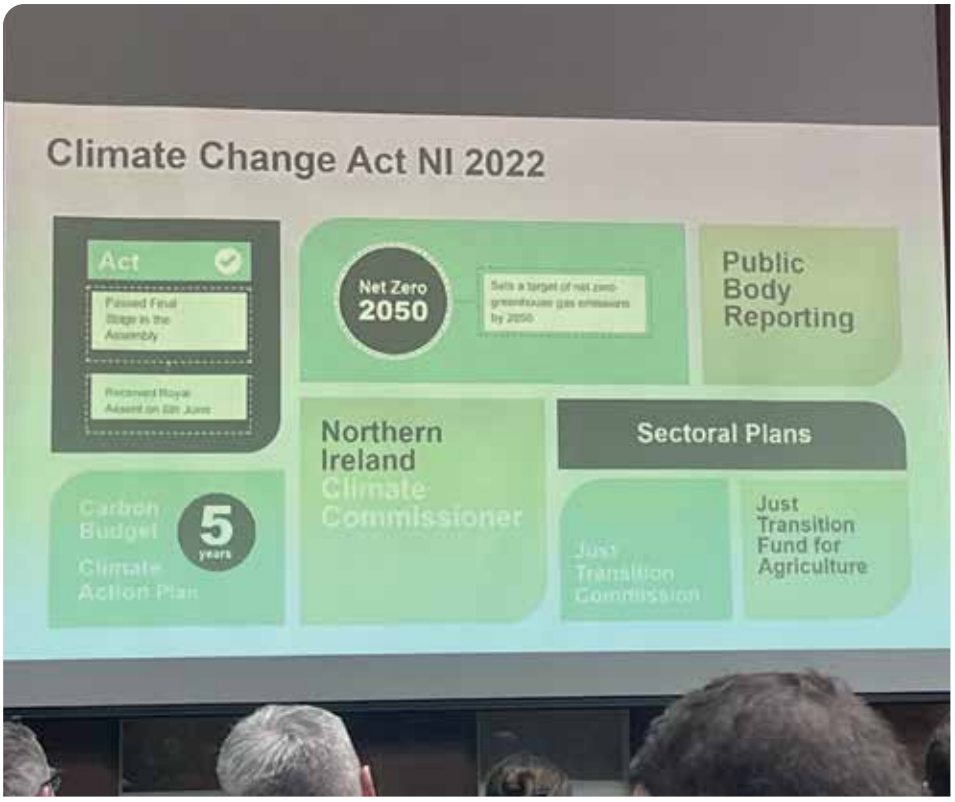
Decarbonisation can only be achieved with consent, and it is crucial consumers understand policy plans, view them as fair and feel their views have been listened to.

A holistic approach

A holistic approach to any future heat policy or energy strategy is required. OFTEC believes most of Northern Ireland's rural housing stock can be categorised as complex to decarbonise.

A key ally we need to win over to support the inclusion of sustainable biofuels in the forthcoming energy strategy is the NI Housing Executive. Not only is it a management agency for around 90,000 social houses, it is also the local Home Energy Conservation Authority (HECA), so its views on energy transition would be respected by the NI Government.

To that end, we met with their sustainability manager and suggested that renewable liquid fuels, specifically Hydrotreated Vegetable Oil (HVO), could provide a practical, low carbon solution to the Executive's off-grid homes in an easy, affordable, and non-disruptive way.



NIHE trial

After a positive discussion, in which they raised issues such as supply and affordability, the NIHE has agreed to trial 30 boilers using HVO in their next phase of renewable testing.

This is very positive news. It offers an invaluable opportunity for our sector to demonstrate the adaptability of liquid fuel boilers and reliability of its products in real-world settings.

We continue to lobby our local politicians and most get that their constituents will struggle to fund even part of the c.£24k cost to move to a heat pump (with thermal upgrades required to their properties).

The good news is that the Economy Minister, Conor Murphy has followed up to our written question on the inclusion of sustainable biofuels in the future energy policy with a positive response.

The Minister said: "A key principle of the Strategy is to replace fossil fuels with renewable energy, ultimately ending the importing of fossil fuels, and utilising renewable sources such as liquid biofuels like HVO is integral to this shift."

This is the Minster who will ultimately sign off on a new energy strategy for Northern Ireland. For us, the future looks bright, the future looks to include sustainable biofuels for heat in Northern Ireland.

Talon inspires the next generation of installers

Championing the next generation of plumbers, Talon, has unveiled the debut instalment of its "Apprentice Questions" video series.

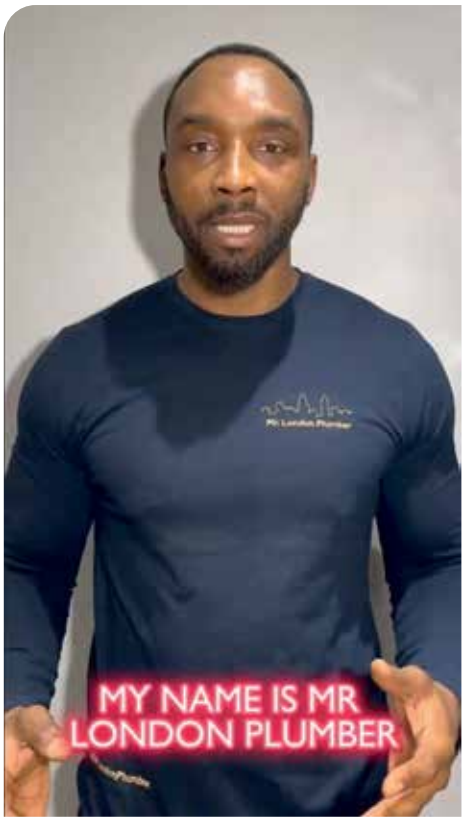
This inspirational campaign spotlights seasoned installers who began their journey as apprentices and have since forged successful careers in the plumbing sector. The video series serves as a platform for these experienced plumbers to share their personal stories – the 'why and how' of their career choices, offer advice to budding apprentices and underscore the essential skills required to excel in this field.

The first episode features Jayson Fairburn, aka Mr. London Plumber on Instagram, who details his reasons for entering the trade: "I always saw it as this person works for themselves and can work for whoever they want," he says. "I wanted to do that – and I wanted to have the freedom to be able to move wherever I wanted and do business wherever I wanted."

The Apprentice Questions initiative is part of Talon's ongoing commitment to support and invest in the future of the trades. The company sponsors the prestigious HIP! Learner of the Year award, supplying thousands of pipe clips, has launched of an exciting competition to win an 'Apprentice Starter Toolkit' and a range of Talon pipe clips and goodies. It is also a sponsor of HIP Female Skills 2024, which has three regional heats over February and March and the grand final in April.

"At Talon, we want to empower the next generation of plumbers with the tools, knowledge and inspiration they need to build a thriving career," explains Mike Morris, Talon's Marketing Manager.

"It's not just about providing top-notch accessories and support; it's about creating a community that dedicated, keen candidates want to be a part of and we hope our Apprentice Questions series encourages more of the right people into the trade."



New product courses from Grant

Grant UK's Training Academy has added two new face-to-face courses to its offering, both of which are aimed at heat pump installers. As well as a Hybrid Solutions course, there's also a course dedicated to the new Aerona Smart Controller and EvoLink Hybrid System Hub,

Hybrid solutions course

The Hybrid Solutions course is one day in duration and is intended for domestic heating and renewables installers who have previously completed one of Grant's Aerona³ air source heat pump courses, either in-person or online. The course provides a combination of hands-on, practical training with theory and covers the Grant VortexAir Hybrid, the new EvoLink Hybrid System Hub as well as Grant's low loss header systems.

During the course, candidates will learn about the specification, construction, performance, operation, electrical wiring, installation and commissioning of the VortexAir and EvoLink Hybrid System Hub as well as the operation, hydraulic circuits and electrical diagrams of Grant's low loss header systems.

Smart Controller and EvoLink product training

The second course is the one-day Smart Controller and EvoLink product training course. This course is also intended for heating and renewables installers who have completed one of the in-person or online Grant Aerona³ air source heat pump courses. The course is split into two, with the first half dealing with theory and hands-on training on the Aerona Smart Controller and the other half covering the EvoLink Hybrid System Hub.

Candidates will learn about the Smart Controller's touchscreen display, system components, electrical connections, system configuration, operation and settings as well as system hydraulic circuits, electrical diagrams and the controller kits in which the Aerona Smart Controller is supplied. Candidates will also learn about the EvoLink's product specification, construction and operation, its installation, electrical connections, settings and commissioning.

Welcome additions

"We're pleased to add these new face-to-face courses to the suite of product training courses that we deliver in Swindon, Hawes, Livingston and Norfolk," says Grant's Training Manager Phil Stanley.

"For installers interested in learning about the different hybrid heating options supplied by Grant UK, the Hybrid Heating Course provides in-depth training on all of Grant's hybrid range. Meanwhile, for installers who wish to specifically learn about the Aerona Smart Controller and EvoLink Hybrid System Hub, the new products course will be more tailored to their requirements."

Both courses have been developed to suit installers who are already trained on Grant heat pumps as the Aerona Smart Controller, EvoLink Hybrid System Hub, VortexAir Hybrid and Grant's low loss header systems are all designed for installation with the Aerona³ range.

Fuel quality standards for fixed combustion – an overview

The last 20 years have seen multiple changes to the standards controlling the quality of the fuel used for fixed combustion purposes. Within the liquid fuel sector, BS 2869 is the standard referred to for fossil fuels such as kerosene for domestic applications, or gas oil for non-domestic applications.

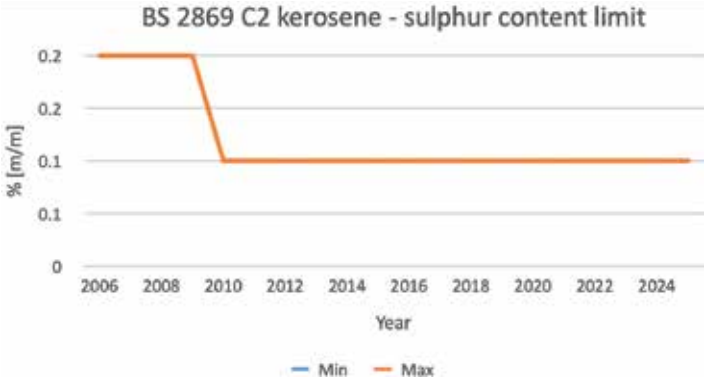
Over the same period, there have also been fundamental improvements to the specifics of C2 kerosene for fixed combustion as follows:

2010
- Introduction of first minimum and maximum density limits for C2 kerosene.
- Introduction of first minimum specific energy content value for C2 kerosene.
- Reduction in maximum sulphur content of C2 kerosene.

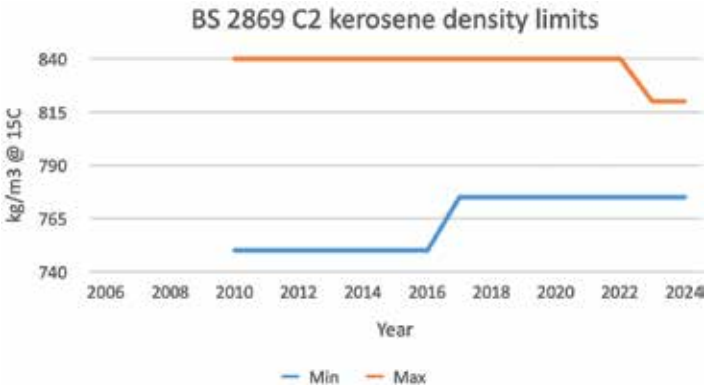
2017
- Minimum density limit of C2 kerosene increased from 750 kg/m3 to 775 kg/m3.

2023
- Reduction of maximum density limit of C2 kerosene from 840 kg/m3 to 820 kg/m3.
- Introduction of first maximum specific energy limit for C2 kerosene.

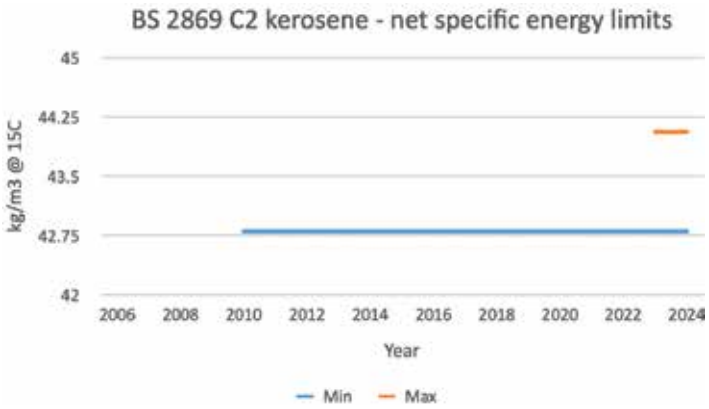
These improvements, which are essential in controlling the consistency of kerosene for fixed combustion purposes, are relatively recent introductions, as these timeline charts clearly demonstrate.



The reduction in sulphur resulted in changed flame luminosity and reduced fuel lubricity, both successfully addressed by adaptations introduced by burner component manufacturers.



In terms of kerosene density range, the heating sector now enjoys the tightest specification since the 1960s, and this has resulted in significantly improved fuel consistency. Density is also the primary factor affecting the specific energy of the fuel.



A consequence of the tightening of the density range is fixed maximum and minimum specific energy values, since these are calculated from the minimum and maximum density limits of the fuel. The resultant consistent density and specific energy enables a fixed combustion process to be set that is appropriate for every fuel delivery. Prior to this consistency, and without adjustments to the combustion process, any increase in specific energy would result in sooted-up boilers and a reduction in specific energy could create cold start issues due to excess air in combustion.

It is worthy of note that:

1. Over this 25-year period the kerosene specification regarding water has never changed, it has always been, and remains, 'no visible water'. If water is found in a customer's tank, then it should be considered as exactly that, "water in a customer's tank" rather than "water in the fuel", since water and oil do not mix.

   Water (which leads to sludge) in tanks is predominantly due to condensation and/or water ingress into the tank. An essential part of every service visit is to check the tank for water and make the customer aware of any problem identified that requires rectification.

2. There is no permissible bio-content within BS 2869 Class C2 kerosene.

3. Premature carboning of vaporising sleeve burner combustion bases and/or Bundy tubes can be attributable to burner bases running hotter than they should below the sleeve burner. This may be due to insufficient flue draught (unlined and/or oversized stack) and/or insufficient fresh oxygenated combustion air supply (no air brick!).

Article compiled and submitted by Alan Black Oil Heating Consultancy Services Ltd.
BS 2869:2023 is available from https://knowledge.bsigroup.com/products/fuel-oils-agricultural-domestic-commercial-and-industrial-fixed-combustion-applications-specification?version=standard

Tanks again!

An article published in the Oil Installer last year discussed key installation details concerning fuel storage tanks. This article serves as a reminder about the classifications of buildings when installing liquid fuel storage tanks in respect of fire protection.

Several important points should be considered when installing a fuel storage tank. These are firstly to determine the fire protection required, secondly whether the tank is to be installed at a domestic or non-domestic premises and also to consider storage volume of fuel.

You should be aware that a tank serving a dwelling with a capacity of no greater than 3500 litres is permitted for domestic installations. However, this changes if the tank capacity exceeds 3500 litres, as the installation would then be classed as non-domestic where more onerous fire protection requirements apply.

Planning permission may also be needed and therefore checks have to be made with the local authority planning department to find out if there are restrictions affecting tank location.

It is also permissible to have multiple tanks serving a dwelling providing each tank does not exceed 3500 litres in capacity. To achieve compliance, the following points should be considered:

- A minimum separation distance of 600mm between each tank, ensuring the combined capacity of the tanks does not exceed 3500 litres (domestic fire protection requirements would apply to the tanks); or
- having a minimum separation distance of 1.8 metres between each tank, then domestic fire protection requirements applying to each tank (separation distances or fire-resistant barrier/s); or
- installing fire resistant barrier/s between each tank offering a minimum 30-minute fire resistance (normal height and width requirements apply). Then once again domestic fire protection requirements applying to each tank with separation distances or fire-resistant barrier/s installed for compliance in accordance with national building regulations.

Note: If there is more than one tank located on a site serving more than one dwelling and each owner has access to their tank, the installation would be deemed as a non-domestic installation.

What else would be classed as a non-domestic tank installation? For example, if the tank was serving a church, village hall, public house, office, warehouse, guest house, hotel etc, these installations would be deemed non-domestic. While this article does not provide a comprehensive list, the technical team at OFTEC will be pleased to provide advice and support.

Fuel price commentary

Some aspects of this quarter's fuel prices are hard to explain. Why, for example, has the cost of running a heat pump in Great Britain fallen in the last year, while the cost of other types of electric heating, such as night storage heaters, has increased?

The answer would seem to be in the different electricity price tariffs offered by the energy companies, which vary considerably, and of which the Sutherland Tables use just a handful for their comparisons. That said, it is striking that users of storage heaters – who are typically less affluent than heat pump owners and use less efficient heating – are offered more expensive tariffs and have seen their prices increase, while heat pump owners have seen prices fall. It suggests that something is fundamentally wrong with the energy market.

The situation in Northern Ireland appears clearer as all electric heating is more expensive, but storage heater users are again suffering disproportionally, with a massive 72% increase in the last year.

For most other heating technologies, the news is somewhat better, although the picture is varied. Oil heating costs have fallen in all areas, and even though the price changes are quite small, it is now the cheapest fuel everywhere – which is great news for oil heating customers. Wood pellets are the other technology to see price falls in all areas, substantially so in Northern Ireland. In Great Britain, LPG has increased in price, while the Government's price cap has helped the annual cost of mains gas to come down. However, in Northern Ireland and RoI, the annual cost of mains gas has risen significantly.

It is noteworthy that all current heating costs are higher than their respective four-year averages. With war raging in Ukraine and the Middle East, it is doubtful if this will change during the rest of 2024 – which is bad news for consumers.

Comparative space and water heating costs for a three-bedroomed home In Great Britain, Northern Ireland and the Republic of Ireland

GREAT BRITAIN (average)

	Mar-23	Mar-24	Price change	% Difference	4 year average
Electric storage heaters	3189	**3324**	£135	4%	£2,826
Gas condensing boiler	2120	**1577**	-£543	-26%	£1,263
LPG Condensing boiler radiators and DHW cylinder	1773	**1904**	£131	7%	£1,600
Oil condensing boiler, radiators and DHW cylinder	1392	**1373**	-£19	-1%	£1,201
Wood pellets	2963	**2340**	-£623	-21%	£1,921
Air source heat pump radiators	3417	**2744**	-£673	-20%	£2,404
Air source heat pump underfloor	2858	**2309**	-£549	-19%	£2,001

NORTHERN IRELAND

	Mar-23	Mar-24	Price change	% Difference	4 year average
Electric storage heaters	2139	**£3,675**	1536	72%	£2,502
Gas condensing boiler	1733	**£2,215**	482	28%	£1,395
LPG Condensing boiler radiators and DHW cylinder	2293	**£2,209**	-84	-4%	£2,052
Oil condensing boiler, radiators and DHW cylinder	1525	**£1,333**	-192	-13%	£1,143
Wood pellets	2116	**£1,817**	-299	-14%	£1,528
Air source heat pump radiators	2407	**£2,875**	468	19%	£2,171
Air source heat pump underfloor	1991	**£2,875**	884	44%	£1,804

REPUBLIC OF IRELAND

	Mar-23	Mar-24	Price change	% Difference	4 year average
Electric storage heaters	4583	**4039**	-544	-12%	€3,170
Gas condensing boiler	2781	**4039**	1258	45%	€1,980
LPG Condensing boiler radiators and DHW cylinder	2856	**2856**	0	0%	€2,571
Oil condensing boiler, radiators and DHW cylinder	1965	**1899**	-66	-3%	€1,601
Wood pellets	2478	**2345**	-133	-5%	€1,777
Air source heat pump radiators	3866	**3420**	-446	-12%	€2,712
Air source heat pump underfloor	3254	**2884**	-370	-11%	€2,294

The tables above are based on quarterly data published by the Sutherland Tables. They show the annual average cost of a range of heating options for a typical pre-1980 three bedroomed semi-detached home with a heat requirement of approximately 16,000 kWh.Prices are shown in pounds sterling (£) for Great Britain and Northern Ireland, and euros (€) for the Republic of Ireland.

HWOS
SERVICE CLUB

INTRODUCING HEATING WORLD OF SPARES SERVICE CLUB

THE NEW LOYALTY PROGRAM FOR SERVICE ENGINEERS

JOIN THE CLUB TO EARN...

SERVICE CLUB

- OR -

PREPAID DEBIT

HWOS VOUCHERS TO SAVE YOUR BUSINESS MONEY

PREPAID DEBIT CARDS TO SAVE YOURSELF MONEY!

EVERY ORDER COUNTS!

CLIMB THE RANKS OF THE CLUB TO UNLOCK EVEN MORE REWARDS AND BENEFITS, INCLUDING MEMBER-ONLY PRICES, FREE DELIVERIES, FREE GIFTS, TOKEN BONUSES AND MORE!

THERE'S SOMETHING FOR EVERY MEMBER!

HEAD TO HWOS.CO.UK TO SIGN UP TODAY! IT'S FREE!

JOIN THE CLUB • LEVEL UP • GET REWARDS!

SERVICE CLUB | HEATING WORLD OF SPARES

HEATING WORLD OF SPARES LTD.

OIL, GAS, LPG & HEATING SPARES SHIPPED AND DELIVERED 7 DAYS A WEEK *

WWW.HWOS.CO.UK
01388 760 333 • SALES@HWOS.CO.UK

Heating World of Spares and HWOS Service Club T's & C's apply. All benefits, rewards and gifts subject to change at any time.
*Subject to availability and location. Order cut-off times vary by courier and day of the week. Certain bank holidays excluded. See hwos.co.uk for details.

ENGINEERING
TOMORROW

3-year warranty on all Danfoss Diamond DLC Service pumps

HVO

Danfoss Burner Components offers the best in the industry
3-year warranty on UK and Ireland service pumps.

Danfoss Diamond Pump is the strongest service pump ever built.