



An industry creating its own new dawn – liquid biofuel trials in the UK

Accepting the inevitability of an end date for the use of fossil fuels in home-heating, industry bodies UKIFDA and OFTEC, as well as tank manufacturers, distributors and many more are coming together to ensure there is a future for liquid biofuels in our industry. The first UK trials of alternative liquid fuels in home-heating were rolled out late last year and our content editor, Stephanie Samuel, caught up with UKIFDA chief executive Ken Cronin, OFTEC CEO Paul Rose and John and Robert Weedon, directors of South West based distributor Mitchell and Webber, to find out more about this forward-thinking approach that could make industry history.

"I have been hugely impressed by the work the industry has done on the winter trials," said Ken Cronin, president of UKIFDA. "Both the Climate Change Committee (CCC) and the National Grid Future Energy Scenarios (FES) predict a significant proportion of our customers will require some form of biofuel by 2050 to help meet the UK's net zero commitment. We support these assertions as these homes tend to be rural and therefore difficult to reach for grid purposes and/or of an age and construction that make retrofitting for other technologies difficult technically or economically."

Enthusiastically embraced

Operating out of Cornwall, distributor Mitchell and Webber was the first company to deliver new, low carbon heating fuel for the UK trials in a partnership with OFTEC and UKIFDA. Commenting on the trials, which have seen a number of customers who previously relied on heating oil trialling HVO since December last year, John Weedon said:

"We pushed hard to be the ones to trial this first because we have thousands of customers who will have difficulty in changing heating technologies. Talking about alternative fuels can only get you so far, you've got to get up and

make it happen.

"We've been in this industry for over 120 years and, even as the end date for fossil fuels gets ever closer, there are still 38,000 homes running on oil in Cornwall. As ever, we are determined to get the best alternative fuel for our customers."

Speaking about the attitudes of their customers, Robert Weedon confirmed their enthusiastic interest:

"We are getting lots of enquiries from those who would be happy to participate in the trial, and we've had feedback that customers are delighted that we are looking towards the future for fuel, especially as so many are still using oil here."

It is pleasing to see an early confidence in HVO already in Cornwall, as John explained:

"This positive attitude is great news for Mitchell and Webber customers, as the greater the demand for HVO, we very much hope the more affordable it will become. The positive response so far may be largely down to the fact that the cost of conversion to HVO, or other alternative fuels, is very minimal compared to

the cost of heat pump installation, for example."

A huge opportunity for a cost-effective solution

Ken Cronin commented:

"We believe very much in finding the right solution at the right cost with the least amount of disruption for each home. We know that customers are concerned about climate change but equally concerned about cost. What these trials are doing is showing that there is a very simple technical solution and I am delighted at the level of interest being shown."

Robert Weedon said:

"We have to be practical about what is and isn't a possibility for our customers. There is fuel poverty here in Cornwall. Not everyone can afford heat pumps which cost over £10k. The government grants will dry up by March this year and questions remain over the capabilities of the grid – especially with electric charging points for vehicles also a key topic here."

OFTEC CEO, Paul Rose, also expressed confidence in both the fuel and the trials:

"We are extremely confident that HVO



will be compatible with virtually all existing oil heating systems. However, undertaking rigorous trials is essential to provide the level of confidence in the new fuel that consumers and government will demand, so this is a key step in the process of bringing the fuel to market. It also enables industry to learn about the characteristics of the new fuel and to prepare the guidance information that heating technicians and fuel suppliers will require.

"The trial is in its early stages, but we have plans to make it much bigger. To do this, we are applying for government innovation funding and are hopeful this will be successful."

"There is increasing recognition by policy makers that many off-gas-grid households will not be able to convert to other types of renewable heating in a cost-effective way, due to the high cost of both the appliance and energy efficiency improvements that will be needed. Consequently, there is a huge opportunity for a renewable liquid fuel such as HVO to heat these hard-to-treat homes."

"Conversion to HVO from kerosene will lower the carbon emissions of the average home by around 88% – a huge reduction and greater than both heat pumps and biomass systems. If our industry can provide governments with the evidence that HVO offers a low cost, reliable and disruption-free solution, then we should be able to retain a significant market share and play a vital role in meeting the net zero target."

Expansion of the trials

The trial is now expanding, with other distributors trialling HVO with their own

customer base. Mitchell and Webber has also expanded the appliances that they are testing HVO with as John confirms:

"It's working better than expected at the moment, but we are rigorously testing this over an extended period of time and also for 5 different appliances, not just boilers."

So far, the biofuel has also been used to fuel a customer's Aga cooker, with a pot burner conversion, and initial results show that more heat is produced with less fuel used.

Financial and policy support will be key to success

Commenting on the expansion of these trials in the UK, Paul Rose said:

"Up to now, the trials have been funded by industry itself, whether by trade associations such as OFTEC and UKIFDA, or by individual companies such as Mitchell and Webber, who are passionate about the potential that HVO offers. The fact that we have done this underlines how serious our industry is, and the good news is that this work is being coordinated by a steering committee covering both fuel distributors and OFTEC. This will enable us to capture the learning outcomes and maximise the PR and policy value of this work."

Looking ahead to the next stages of the trials, Ken Cronin said:

"The next stage for us will be to expand the trial geographically and across the range of possible appliances and talk to government about making this a reality."

Paul Rose also highlighted how expanding the trials will be expensive, hence the industry

bodies bidding for government funding:

"The government has already supported other heating sectors – for example a massive heat pump trial is underway – so given the comparatively modest funding we will be looking for, there's every reason to be hopeful. The aim will be to have a much-expanded trial underway for the next heating season."

Paul continues:

"This year will be important in terms of determining future heat policy and the role HVO will play. To achieve policy support for HVO, we will need to progress the field trial and overcome outstanding concerns about availability and sustainability. The latter issue should be straightforward – HVO produced in Europe already satisfies very strict sustainability regulations."

"Availability is more of a challenge because other sectors such as transportation also need the fuel. However, HVO production is ramping up rapidly and we are in direct contact with producers who are keen to supply our market. So, we are increasingly confident that supply will be available if HVO is supported in heating by government policy."

"This is essential because, at least initially, some form of subsidy may be necessary to cushion consumers from an increase in cost. However, the need to find a credible solution for hard-to-treat rural homes means that government support should be forthcoming, and this is something that everyone in our industry should be pushing for."

In Cornwall, Mitchell and Webber continue to see successes with the trial and look ahead to welcoming the G7 leaders, who will be meeting at Carbis Bay in Cornwall, in just over two months.

Commenting on why Cornwall was chosen to host this meeting to promote a better, green world, Boris Johnson was quoted in a local paper saying:

"Both these ambitions are summed up in Cornwall where the UK's renewable energy industry and conservation projects point the way to a green industrial future."

The visitors will include the new US President as well as the leaders of Canada, France, Germany, Italy, Japan, Australia, South Korea and the President of the EU.

John Weedon commented:

"With the UK also hosting COP26 in Glasgow this November, the UK is very much under the spotlight!"

We look forward to seeing how the trials progress and expand over the next year and to covering more history-in-the-making moves from the fuel oil industry in the UK.

