

OFTEC consultation response

Subject: Department for Communications, Climate Action and Environment - Biofuel Obligation Scheme
Date: 19^h January 2018
Author: [REDACTED]



About OFTEC

The Oil Firing Technical Association (OFTEC) is a trade association that represents the interests of oil-fired boiler, oil storage tank and associated equipment manufacturers in the UK and Republic of Ireland. We work with a number of training centres across these regions that offer education and competency assessment to heating technicians, and we operate a UKAS accredited competent persons register for technicians installing and maintaining oil, solid fuel, heat pump and solar thermal installations, and undertaking Part P electrical work.

Comments on the Biofuel Obligation Scheme

Q1. *In order to meet Ireland's 2020 renewable energy target in the transport sector, it is proposed to increase the biofuel obligation rate to 10% from 2019 and circa 12% from 2020.*

OFTEC would support, in principle, an increase in the biofuel obligation in the transport sector, providing that the biofuels being used are easily accessed, reasonably priced, and derived from sustainable sources. Also, that sufficient testing has been carried out by engine and supply equipment manufacturers to conclude that there are no detrimental effects on equipment performance and reliability.

Q7. *Currently, the Biofuels Obligation Scheme is limited to the transport sector. In the heating sector, there is a high use of fossil fuels (including oil) and a target 12% of energy consumption from renewable sources by 2020.*

- a. *What is your opinion on the potential for an obligation scheme (similar to the Biofuels Obligation Scheme) in the heat sector?*
- b. *What do you see as the technical barriers to introducing such a scheme?*

OFTEC would not support mandating the inclusion of biofuels in heating fuels unless extensive research is conducted into its effects on long term storage, supply and combustion. It must also be considered that the majority of domestic oil storage tanks are manufactured from polyethylene, which will not have been tested as compatible with biofuels.

In 2010, with the assistance of its members and the University of East Anglia, OFTEC conducted field trials of 30% bio/70% kerosene blend fuels on a number of properties. To prevent equipment failure, each test site was provided with a new oil tank as through laboratory testing and industry experience, it is accepted that hygroscopic biofuels have a detergent effect inside of fuel tanks, which cleans and holds contaminants in suspension. This ultimately leads to blocked fuel filters and fuel starvation at the boiler.

It must also be considered that two burner types are available in the oil heating sector – pressure jet, which vaporises liquid fuel by injecting it under pressure into a turbulent air stream, and vaporising burners, which vaporises oil under heat and natural draught drawing up through the the burner.

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Whilst pressure jet burners are proven to be able to combust 30% FAME to EN 12514 mixed with kerosene, laboratory testing on vaporising burners was abandon due to flame instability, using blends as low as 5% FAME. It would be impractical for customers owning both a pressure jet fired boiler and a vaporising cooker/stove to accommodate two separate oil storage tanks.

In support of the global commitment to reduce carbon emissions from heat, OFTEC is currently exploring liquid biofuel options as a substitute for kerosene and we submit that to impose small percentage biofuel blends on to the heating market, at this time, is premature.

The ultimate solution for liquid fuel heating has to be in the use of very low / zero carbon based fuels and these will take time to develop. In the short term, we are in discussions with our members as to how advances in burner technology (Low NOx blue flame, multi-stage and fully modulating) can be better employed and integrated with heating system controls to reduce the quantity of fuel burned and resultant emissions.

If you have any questions regarding the content of this submission or require any additional information, please do not hesitate to contact me.

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