

HVO – The Facts

- HVO (Hydrtreated Vegetable Oil) is made from 100% renewable and sustainable waste derived raw materials and is certified via the International Sustainability and Carbon Certification (ISCC) scheme. Whilst HVO is made using vegetable oils it can also be produced using tallow and used cooking oil.
- HVO uses hydrogen instead of methanol as a catalyst, so HVO is more sustainable than other bio fuels.
- HVO reduces 90% of greenhouse emissions when it replaces kerosene in heating systems.
- There are just over 4 million UK homes that are 'off-grid' meaning they are not connected to the gas mains. These are mostly rural homes and they use either oil, LPG, electricity, biomass or heat pumps to supply heat to the home.
- HVO has one of the lowest carbon emission levels for off grid heating solutions:

HVO = 0.036kgCO₂e/kWh
Biomass = 0.053CO₂e/kWh
Electricity 0.233CO₂e/kWh
- Research by industry body, OFTEC, concluded that air source heat pump serving radiators would comparatively emit 2.097 tonnes of CO₂e 2 per annum, which is more than three times the amount of CO₂e emitted by HVO with a new condensing boiler and system upgrade serving radiators.
- Production of HVO is increasing across Europe and the world. In 2017 the production level was 4.75 million tonnes and in 2020 it was 6.8 million tonnes.
- There are no HVO production plants in the UK at the moment, seven plants have opened since 2019.
- The cost to change an existing traditional oil boiler to HVO is minimal, whereas government figures to install a heat pump is £10,400 and biomass systems £12,000. Please note that all Hounsfield Boilers are HVO ready.
- When using HVO in an HVO ready kerosene boiler there is no need to switch boiler, no new heating systems required, and no large investment needed from homeowners for new technologies to be installed. HVO simply 'drops-in' to replace traditional oil.
- OFTEC research shows that HVO would also give slightly reduced running costs to householders when compared to heat pumps.

